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January to December issues, inclusive, 1942

McGraw-Hill Publishing Company

330 West 42nd St., New York City

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BUYERS' GUIDE . . . . . for the ELECTRONIC and ALLIED INDUSTRIES

IN THIS DIRECTORY of suppliers, products are alphabetically listed in three separate sections:

1—PARTS, ACCESSORIES, MATERIALS

Basic commodities used in the fabrication, assembly and maintenance of electronic devices

2—ELECTRICAL INSTRUMENTS

Test and measurement items used in the design, production and adjustment of electronic devices

3—ELECTRONIC EQUIPMENT

Devices having electronic operating principles, used by other fields as well as by the electronic industry itself

In each of these three sections products are listed under the noun or principal word. Certain products, not readily classified, have been arbitrarily included in the third section. The index following immediately after this title page serves as a general key to all three sections.

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Tubing, Paper D-22
Tubing, Phenolic D-10
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Vibration Controls D-30
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Wattmeters D-27
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Wood Screws D-18
Wrapping Controls D-30

X-Ray Tubes D-22

PARTS, ACCESSORIES and MATERIALS

Aluminum

see Metals

Anodes

CARBON ANODES

Keystone Carbon Co., St. Marys, Pa.
National Carbon Co., Carbon Sales Div., Cleveland, Ohio
Ohio Carbon Co., 12508 Berea Rd., Cleveland, Ohio
Pure Carbon Co., St. Marys, Pa.
Speer Carbon Co., St. Marys, Pa. (See p. 24.)
Stackpole Carbon Co., Tannery St., St. Mary's, Pa.
Superior Carbon Products, Inc., 9115 George Ave., Cleveland, Ohio
United States Graphite Co., 1621 Holland Ave., Saginaw, Mich.

METAL ANODES

Bishop & Co., Platinum Works, J., 12 Channing Ave., Malvern, Pa.
Callite Tungsten Corp., 544 39th St., Union City, N. J.
Climax Molybdenum Co., 500 Fifth Ave., New York, N. Y.
Fansteel Metallurgical Corp., 2200 Sheridan Rd., North Chicago, Ill.
General Tungsten Mfg. Co., 502 23d St., Union City, N. J.
Goldsmith Bros. Smelting & Refining Co., 58 E. Washington St., Chicago, Ill.
Revere Copper & Brass, Inc., 230 Park Ave., New York, N. Y.

Antennas

AUTO ANTENNAS

ABC Radio Laboratories, 3334 N. New Jersey St., Indianapolis, Ind.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Amy, Aceves & King, Inc., 11 W. 42d St., New York, N. Y.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Fishwick Radio Co., Colorado Bldg., Washington, D. C.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Kraeuter & Co., 585 18th Ave., Newark, N. J.
Noblitt-Sparks Industries, E. 17th St., Columbus, Ind.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Premax Products Div., Chisholm-Ryder Co., College & Highland Aves., Niagara Falls, N. Y.
Radiart Corp., 3571 W. 62d St., Cleveland, Ohio
RCA Mfg. Co., Camden, N. J.
Snyder, Inc., 813 Noble St., Philadelphia, Pa.
Superior Tube Co., Norristown, Pa.
Ward Products Corp., 1523 E. 45th St., Cleveland, Ohio

HOME ANTENNAS

ABC Radio Laboratories, 3334 N. New Jersey St., Indianapolis, Ind.
Alden Products Co., 715 Center St., Brockton, Mass.
American Communications Corp., 306 Broadway, New York, N. Y.
Amy, Aceves & King, Inc., 11 W. 42d St., New York, N. Y.
Andrea Radio Corp., 4820 48th Ave., Woodside, N. Y.
Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Cornish Wire Co., 15 Park Row, New York, N. Y.
Eagle Electric Mfg. Co., 59 Hall St., Brooklyn, N. Y.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Fishwick Radio Co., Colorado Bldg., Washington, D. C.
Fleron & Son, M. M., 113 N. Broad St., Trenton, N. J.
Fowler Mfg. Co., 9 Rutger St., St. Louis, Mo.
General Electric Co., Bridgeport, Conn.
General Television & Radio Corp., 1240 N. Homan Ave., Chicago, Ill.
General Winding Co., 254 W. 31st St., New York, N. Y.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Jefferson-Travis Radio Mfg. Corp., 380 2nd Ave., New York, N. Y.
J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Noblitt-Sparks Industries, E. 17th St., Columbus, Ind.
Norwest Radio Laboratories, Blaine Ave. & Hill St., Shelby, Mont.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Premax Products Div., Chisholm-Ryder Co., College & Highland Aves., Niagara Falls, N. Y.
Radex Corp., 1328 Elston Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Sparks-Withington Co., Jackson, Mich.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Technical Appliance Corp., 516 W. 34th St., New York, N. Y.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.
Vertrod Mfg. Co., 132 Nassau St., New York, N. Y.
Vogue Co., 8134 Vincennes Ave., Chicago, Ill.
Ward Products Corp., 1523 E. 45th St., Cleveland, Ohio

TRANSMITTING ANTENNAS

American Bridge Co., Frick Bldg., Pittsburgh, Pa.
Blaw-Knox Co., Farmers Bank Bldg., Pittsburgh, Pa. (See page 102.)
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hardner Corp., George H., 602 Hamilton St., Allentown, Pa.
Harrell Co., D. H., 10640 Buffalo Ave., Chicago, Ill.
Hartenstine-Zane Co., 225 Broadway, New York, N. Y.
Hoke Vertical Radiator Co., 135 S. Market St., Petersburg, Va.
International-Stacy Corp., 875 Michigan Ave., Columbus, Ohio
Isolantite, Inc., 343 Cortland St., Belleville, N. J.
Lehigh Structural Steel Co., 17 Battery Pl., New York, N. Y.
Lingo & Son, John E., 28th St., & Buren Ave., Camden, N. J. (See page 168.)
Mims Radio Co., Texarkana, Ark.
Superior Tube Co., Norristown, Pa.
Truscon Steel Co., Albert St., Youngstown, Ohio
Western Electric Co.—see Graybar Electric Co.
Wilcox Electric Co., 3947 State Line, Kansas City, Mo.
Wincharger Corp., 2700 Hawkeye Drive, Sioux City, Iowa. (See page 140.)

Attenuators

see Controls

Baffles

SPEAKER BAFFLES

Adler Mfg. Co., 2901 W. Chestnut St., Louisville, Ky.
Art Specialty Co., 3245 Lake St., Chicago, Ill.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Castlewood Mfg. Co., 12th & Burnett, Louisville, Ky.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Hadley, Robert M., 711 E. 61st St., Los Angeles, Cal.
Hawley Products Co., St. Charles, Ill.
Illinois Wood Products Corp., 2512 S. Damen Ave., Chicago, Ill.
Jensen Radio Mfg. Co., 6601 S. Laramie Ave., Chicago, Ill.
Leotone Radio Co., 63 Dey St., New York, N. Y.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Million Radio & Television Laobratories, 1617 N. Damen St., Chicago, Ill.
Operadio Mfg. Co., 13th & Indiana Sts., St. Charles, Ill.
Racon Electric Co., 52 E. 19th St., New York, N. Y.
Ray Lab, Inc., 211 Railroad Ave., Elmira, N. Y.
RCA Mfg. Co., Camden, N. J.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
University Laboratories, 195 Chrystie St., New York, N. Y.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Watterson Radio Mfg. Co., 2608 Ross Ave., Dallas, Tex.
Wright-Decoster, Inc., 2233 University Ave., St. Paul, Minn.

Ballasts

see Tubes

Batteries

DRY BATTERIES

Acme Battery Corp., 59 Pearl St., Brooklyn, N. Y.
Bright Star Battery Co., 200 Crooks Ave., Clifton, N. J.
Burgess Battery Co., Freeport, Ill.
Deal Electric Co., 338 Berry St., Brooklyn, N. Y.
Edison Storage Battery Div., Thomas A. Edison, West Orange, N. J.
General Dry Batteries, Inc., 13000 Athens Ave., Cleveland, Ohio
Le Carbone Co., Myrtle Ave., Boonton, N. J.
National Carbon Co., 30 E. 42d St., New York, N. Y.
Philco (Battery Division), Philadelphia, Pa.
Ray-O-Vac Co., Madison, Wis.
Southern Battery Co., Appomattox, Va.
United States Electric Mfg. Corp., 222 W. 14th St., New York, N. Y.
Western Cable & Light Co., Baldwin, Wis.
Winchester Repeating Arms Co., New Haven, Conn.

STORAGE BATTERIES

American Battery Co., 208 W. Kinzie St., Chicago, Ill.
Am-plus Storage Battery Co., 425 W. Superior St., Chicago, Ill.
Bowers Battery Mfg. Co., Reading, Pa.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Edison Storage Battery Div., Thomas A. Edison, Inc., West Orange, N. J.
Electric Storage Battery Co., Allegheny Ave. & 19th St., Philadelphia, Pa.
General Lead Batteries Co., Chapel St. & Lister Ave., Newark, N. J.
General Storage Battery Co., 2005 Locust St., St. Louis, Mo.
Globe Union, Inc., 900 E. Keefe Ave., Milwaukee, Wis.
Gould Storage Battery Corp., 35 Neoga St., Depew, N. Y.
Jumbo Battery Mfrs., Ellsworth, Iowa.
K. W. Battery Co., 3705 N. Lincoln Ave., Chicago, Ill.
Monark Battery Co., 4556 W. Grand Ave., Chicago, Ill.

National Battery Co., First National Bank Bldg., St. Paul, Minn.
Philco (Battery Division), Philadelphia, Pa.
Prest-O-Lite Battery Co., 4500 W. 16th St., Indianapolis, Ind.
Solar Corp., 944 W. Bruce St., Milwaukee, Wis.
Universal Battery Co., 3410 S. La Salle St., Chicago, Ill.
USL Battery Corp., 1725 Highland Ave., Niagara Falls, N. Y.
Western Cable & Light Co., Baldwin, Wis.
Willard Storage Battery Co., 246 E. 131st St., Cleveland, Ohio

Belts

DIAL BELTS—see Cable

Breakers

CIRCUIT BREAKERS (for electronic applications)

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
Bunnell & Co., J. H., 215 Fulton St., New York, N. Y.
Burlington Instrument Co., Burlington, Iowa
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Electric Controller & Mfg. Co., 2701 E. 79th St., Cleveland, Ohio
Fenwal, Inc., Ashland, Mass.
General Electric Co., Schenectady, N. Y.
Heinemann Circuit Breaker Co., 97 Plum St., Trenton, N. J. (See page 121.)
Leach Relay Co., 5915 Avalon Blvd., Los Angeles, Cal.
Penn Electric Switch Co., Goshen, Ind.
Roller-Smith Co., Bethlehem, Pa.
Spencer Thermostat Co., Attleboro, Mass. (See page 111.)
Stangard Products Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

Cabinets

METAL CABINETS, CHASSIS AND PANELS

American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio. (See page 163.)
Columbia Metal Box Co., 260 E. 143rd St., New York, N. Y.
Dahlstrom Metallic Door Co., Buffalo St., Jamestown, N. Y.
Erie Can Co., 816 W. Erie St., Chicago, Ill.
Falstrom Co., 7 Falstrom Court, Passaic, N. J.
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y. (See page 163.)
Karp Products Co., 129 30th St., Brooklyn, N. Y.
Lewyt Metal Products Co., 60 Broadway, Brooklyn, N. Y.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass.
Par Metal Products Corp., 32-62 49th St., Long Island City, N. Y. (See p. 146.)
Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn, N. Y. (See page 150.)

PLASTICS CABINETS—see Plastics

RECORD CABINETS

Chicago Sound System Co., 2124 S. Michigan Blvd., Chicago, Ill.
Decca Records, Inc., 50 W. 57th St., New York, N. Y.
Electro Acoustic Co., 2131 Bueter Rd., Fort Wayne, Ind.
Harris Mfg. Co., 2422 W. Seventh St., Los Angeles, Cal.
RCA Mfg. Co., Camden, N. J.
Schloss Bros. Corp., 801 E. 135th St., New York, N. Y.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.

WOOD CABINETS

Adler Mfg. Co., 2901 W. Chestnut St., Louisville, Ky.
Castlewood Mfg. Co., 12th & Burnett, Louisville, Ky.
Caswell-Runyan Co., Huntington, Ind.
Chicago Novelty Furniture Co., 1750 N. Campbell Ave., Chicago, Ill.
Churchill Cabinet Co., 2119 W. Churchill St., Chicago, Ill.
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Illinois Cabinet Co., Rockford, Ill.
Illinois Wood Products Corp., 2512 S. Damen Ave., Chicago, Ill.
Ingraham Co., Bristol, Conn.
Steger Furniture Mfg. Co., Steger, Ill.
Tillotson Cabinet Co., 1775 Broadway, New York, N. Y.
Waters-Conley Co., 501 First St., Rochester, Minn.
Watterson Radio Mfg. Co., 2608 Ross Ave., Dallas, Tex.
Wells-Gardner & Co., 2701 N. Kildare Ave., Chicago, Ill.

Cable

see also Wire

COAXIAL CABLE and LINES

Alpha Wire Corp., 50 Howard St., New York, N. Y.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Belden Mfg. Co., 4673 W. Van Buren St., Chicago, Ill.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Boston Insulated Wire & Cable Co., 65 Bay St. (Dorchester), Boston, Mass.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Communications Products Co., 363 Cator Ave., Jersey City, N. J.
Cornish Wire Co., 15 Park Row, New York, N. Y.
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Essex Wire Corp., 14310 Woodward Ave., Detroit, Mich.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Insulated Wire Corp., 53 Park Pl., New York, N. Y.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole distributor for Western Electric Co., New York, N. Y.)
Isolantite, Inc., 343 Cortlandt St., Belleville, N. J. (See page 105.)
Lektra Laboratories, 30 E. 10th St., New York, N. Y.
Phelps Dodge Copper Products Corp., 40 Wall St., New York, N. Y.
Precision Tube Co., 3828 Terrace St., Philadelphia, Pa.
Radex Corp., 1328 Elston Ave., Chicago, Ill.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
Simplex Wire & Cable Corp., 79 Sidney St., Cambridge, Mass.
Uniform Tubes, Shurs Lane & Lauriston St., Roxborough, Philadelphia, Pa.
Western Electric Co.—see Graybar Electric Co.

DIAL BELTS and CABLE

J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Schott Co., Walter L., 5266 W. Pico Blvd., Los Angeles, Cal.

Capacitors

FIXED CAPACITORS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass. (See page 122.)
American Condenser Corp., 2508 S. Michigan Ave., Chicago, Ill.
Art Radio Corp., 115 Liberty St., New York, N. Y.
Atlas Condenser Products Co., 548 Westchester Ave., New York, N. Y.
Automatic Winding Co., 900 Passaic Ave., East Newark, N. J.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Cardwell Mfg. Corp., Allen D., 81 Prospect St., Brooklyn, N. Y.
Centralab, 900 E. Keefe Ave., Milwaukee, Wis. (See page 8)
Condenser Corp. of America, 1000 Hamilton Blvd., South Plainfield, N. J.
Condenser Products Co., 1375 N. Branch St., Chicago, Ill.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio
Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J. (See page 19.)
Cosmic Radio Co., 699 E. 135th St., New York, N. Y.
Crowley & Co., Henry L., 1 Central Ave., West Orange, N. J.
Deutschmann Corp., Tobe, Canton, Mass.
Dumont Electric Co., 34 Hubert St., New York,, N. Y.
Eitel-McCullough, Inc., San Bruno, Cal.
Electro-Motive Mfg. Co., S. Park & John Sts., Willimantic, Conn.
Erie Resistor Corp., 644 W. 12th St., Erie, Pa.
Fast & Co., John E., 3123 N. Crawford Ave., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
General Mfg. Co., Waterbury, Conn.
General Radio Co., 30 State St., Cambridge, Mass.
Girard-Hopkins, 1437 23d Ave., Oakland, Cal.
Glyco Products, Inc., 230 King St., New York, N. Y. (See page 134.)
H. R. S. Products, 5707 W. Lake St., Chicago, Ill.
Illinois Condenser Co., 3252 W. North Ave., Chicago, Ill.
Industrial Condenser Corp., 1725 W. North Ave., Chicago, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Johnson Co., E. F., Waseca, Minn.
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Magnavox Co., 2131 Beuter Rd., Fort Wayne, Ind.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Micamold Radio Corp., 1087 Flushing Ave., Brooklyn, N. Y.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
National Union Radio Corp., 15 Washington St., Newark, N. J.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Sangamo Electric Co., Springfield, Ill.
Sevision Magneto Engrg Co., 379 Phillips Ave., Toledo, Ohio
Sickles Co., F. W., Chicopee, Mass.
Solar Mfg. Corp., Bayonne, N. J. (See page 131.)
Sprague Specialties Co., 189 Beaver St., North Adams, Mass.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

COMPRESSED GAS CAPACITORS

Lapp Insulator Co., 31 Gilbert St., Le Roy, N. Y.

VARIABLE RECEIVER TUNING CAPACITORS

Alden Products Co., 117 Main St., Brockton, Mass.
American Steel Package Co., Squire Ave., Defiance, Ohio
Barker & Williamson, Ardmore, Pa. (See page 138.)
Bud Radio, Inc., 2418 E. 55th St., Cleveland, Ohio. (See page 163.)
Cardwell Mfg. Corp., Allen D., 81 Prospect St., Brooklyn, N. Y. (See p. 21.)
De Wald Radio Mfg. Corp., 440 Lafayette St., New York, N. Y.
General Instrument Corp., 829 Newark Ave., Elizabeth, N. J.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Meissner Mfg. Co., Mt. Carmel, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
National Co., 61 Sherman St., Malden, Mass. (See page 158.)

Electrical Coil Winding Co., 2733 Saunders St., Camden, N. J.
Electrical Products Co., 6535 Russell St., Detroit, Mich.
Electricoil Co., 6 Varick St., New York, N. Y.
Freed Transformer Co., 72 Spring St., New York, N. Y.
General Electric Co., Schenectady, N. Y.
General Winding Co., 254 W. 31st St., New York, N. Y.
Globe Phone Mfg. Corp., Reading, Pa.
Guthman & Co., Edwin I., 400 S. Peoria St., Chicago, Ill.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Instrument Resistors, Inc., Little Falls, N. J.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
International Transformer Co., 17 W. 20th St., New York, N. Y.
Light Electric Co., 174 Pennsylvania Ave., Newark, N. J.
Magnetic Windings Co., 16th & Butler Sts., Easton, Pa.
Marion Electrical Mfg. Co., 24 Cliff St., Jersey City, N. J.
Meissner Mfg. Co., Mt. Carmel, Ill. (See page 151.)
Merwin-Wilson Co., New Milford, Conn.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
National Electric Coil Co., 794 Chambers Rd., Columbus, Ohio
Norwalk Transformer Corp., South Norwalk, Conn.
Phelps Dodge Copper Products Corp., American Copper Products Div., 40 Wall St., New York, N. Y.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Premier Crystal Laboratories, Inc., 55 Park Row, New York, N. Y.
Radex Corp., 1328 Elston Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Robertson-Davis Co., 311 N. Desplaines St., Chicago, Ill.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.
Stangard Products Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wheeler Insulated Wire Co., 378 Washington Ave., Bridgeport, Conn.

R.F. RECEIVING or TRANSMITTING COILS

Aladdin Radio Industries, Inc., 501 W. 35th St., Chicago, Ill.
Alden Products Co., 117 Main St., Brockton, Mass
American Communications Corp., 306 Broadway, New York, N. Y.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Barker & Williamson, 235 Fairfield Ave., Upper Darby, Pa.
Coto-Coil Co., 71 Willard Ave., Providence, R. I. (See page 159.)
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
General Winding Co., 254 W. 31st St., New York, N. Y.
Guthman & Co., Edwin I., 400 S. Peoria St., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Johnson Co., E. F., Waseca, Minn.
Meissner Mfg. Co., Mount Carmel, Ill. (See page 151.)
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
National Co., 61 Sherman St., Malden, Mass. (See page 158.)
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Radex Corp., 1328 Elston Ave., Chicago, Ill.
Sickles Co., F. W., Chicopee, Mass.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.

SOLENOID COILS

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
Automatic Switch Co., 41 E. 11th St., New York, N. Y.
Cannon Electric Development Co., 3209 Humboldt St., Los Angeles, Cal.
Coto-Coil Co., 71 Willard Ave., Providence, R. I.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Davis & Co., Dean W., 549 W. Fulton St., Chicago, Ill.
Electric Controller & Mfg. Co., 2701 E. 79th St., Cleveland, Ohio
Electrical Coil Winding Co., 2733 Saunders St., Camden, N. J.
General Electric Co., Schenectady, N. Y.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill.
Instrument Resistors, Inc., Little Falls, N. J.
Jefferson Electric Co., Bellwood, Ill.
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
National Acme Co., 170 E. 131st St., Cleveland, Ohio
Square D Co., 6060 Rivard St., Detroit, Mich.
Supreme Electric Products Corp., 105 Mt. Hope Ave., Rochester, N. Y.
Trombetta Solenoid Co., 419 E. Clybourn St., Milwaukee, Wis.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Condensers

see Capacitors

Connectors

CABLE CONNECTORS AND COUPLINGS

Alden Products Co., 117 Main St., Brockton, Mass.
American Microphone Co., 1915 S. Western Ave., Los Angeles, Cal.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Cannon Electric Development Co., 3209 Humboldt St., Los Angeles, Cal. (See page 110.)
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Electro Voice Mfg. Co., 1239 S. Bend Ave., South Bend, Ind.
General Radio Co., 30 State St., Cambridge, Mass.
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Jones, Howard B., 2300 Wabansia Ave., Chicago, Ill.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Pyle-National Co., 1334 N. Kostner Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Sherman Mfg. Co., H. B., 22 Barney St., Battle Creek, Mich.
Turner Co., 909 17th St., N. E., Cedar Rapids, Iowa
Zierick Mfg. Corp., 385 Gerard Ave., New York, N. Y.

Contacts

see Points

Controls

ATTENUATORS

Audio Development Co., 2833 13th St., S., Minneapolis, Minn.
Centralab, 900 E. Keefe Ave., Milwaukee, Wis. (See page 8.)
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Clarostat Mfg Co., 287 N. Sixth St., Brooklyn, N. Y. (See page 136.)
Daven Co., 158 Summit St., Newark, N. J. (See inside back cover.)
General Radio Co., 30 State St., Cambridge, Mass.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind. (See page 50.)
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill.
Precision Resistor Co., 334 Badger Ave., Newark, N. J.
Remler Co., 2101 Bryant St., San Francisco, Cal.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Tech Laboratories, 7 Lincoln St., Jersey City, N. J.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.

AUTO RADIO CONTROLS—see Escutcheons

VOLUME and TONE CONTROLS

Audio Products Co., 2101 S. Olive St., Burbank, Cal.
Centralab, 900 E. Keefe Ave., Milwaukee, Wis.
Chicago Telephone Supply Co., 1142 W. Beardsley Ave., Elkhart, Ind.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Clarostat Mfg. Co., 287 N. Sixth St., Brooklyn, N. Y.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Daven Co., 158 Summit St., Newark, N. J.
General Radio Co., 30 State St., Cambridge, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Precision Resistor Co., 334 Badger Ave., Newark, N. J.
Remler Co., 2101 Bryant St., San Francisco, Cal.
Rowe Radio Research Laboratory Co., 1103 Bryn Mawr Ave., Chicago, Ill.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Tech Laboratories, 7 Lincoln St., Jersey City, N. J.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.

Converters

ROTARY CONVERTERS—see Generators

Cores

POWDERED IRON CORES

Advance Solvents & Chemical Corp., 245 Fifth Ave., New York, N. Y. (See page 175.)
Aladdin Radio Industries, Inc., 501 W. 35th St., Chicago, Ill.
Crowley & Co., H. L., 1 Central Ave., West Orange, N. J.
Electro Products Laboratories, 549 W. Randolph St., Chicago, Ill.
Ferrocart Corp. of America, Williams St. & Aqueduct Lane, Hastings-on-Hudson, N. Y.
Stackpole Carbon Co., Tannery St., St. Marys, Pa.

Couplings

COAXIAL CABLE COUPLINGS—see Connectors

Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Radio Condenser Co., Davis St. & Copewood Ave., Camden, N. J.
RCA Mfg. Co., Camden, N. J.
Reliance Die & Stamping Co., 1260 Clybourn Ave., Chicago, Ill.

VARIABLE TRANSMITTER TUNING CAPACITORS

Barker & Williamson, 235 Fairfield Ave., Upper Darby, Pa.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Cardwell Mfg. Corp., Allen D., 81 Prospect St., Brooklyn, N. Y.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Johnson, E. F. Waseca, Minn.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
National Co., 61 Sherman St., Malden, Mass.

VARIABLE TRIMMER CAPACITORS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Alden Products Co., 117 Main St., Brockton, Mass.
American Steel Package Co., Squire Ave., Defiance, Ohio
Automatic Winding Co., 900 Passaic Ave., East Newark, N. J.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Cardwell Mfg. Corp., Allen D., 81 Prospect St., Brooklyn, N. Y.
Centralab, 900 E. Keefe Ave., Milwaukee, Wis.
De Wald Radio Mfg. Corp., 440 Lafayette St., New York, N. Y.
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
Electro-Motive Mfg. Co., S. Park & John Sts., Willimantic, Conn.
Erie Resistor Corp., 644 W. 12th St., Erie, Pa.
General Electric Co., Bridgeport, Conn.
General Radio Co., 30 State St., Cambridge, Mass.
Guthman, Inc., E. I., 400 S. Peoria St., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Industrial Instruments Co., 156 Culver Ave., Jersey City, N. J.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Johnson Co., E. F., Waseca, Minn. (See page 96.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Meissner Mfg. Co., Mt. Carmel, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
National Co., 61 Sherman St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Sickles Co., F. W., Chicopee, Mass.
Solar Mfg. Corp., Bayonne, N. J.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.

Cells

Photo-Electric Cells—see Tubes

Cements

RADIO CEMENTS

Alden Products Co., 117 Main St., Brockton, Mass.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
Celanese Celluloid Corp., 180 Madison Ave., New York, N. Y.
Crowley & Co., Henry L., 1 Central Ave., West Orange, N. J.
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.
General Electric Co., Bridgeport, Conn.
Maas & Waldstein Co., 438 Riverside Ave., Newark, N. J. (See page 148.)
Meissner Mfg. Co., Mt. Carmel, Ill.
Schott Co., Walter L., 5266 W. Pico Blvd., Los Angeles, Cal.
Stangard Products Co., 4111 Ft. Hamilton Pkwy, Brooklyn, N. Y.
Zophar Mills, Inc., 112 26th St., Brooklyn, N. Y.

Ceramics

see Insulation

Changers

AUTOMATIC RECORD CHANGERS

Autocrat Radio Co., 3855 N. Hamilton Ave., Chicago, Ill.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Gabel Mfg. Co., John, 1200 W. Lake St., Chicago, Ill.
Garrard Sales Corp., 296 Broadway, New York, N. Y.
General Industries Co., 3537 Taylor St., Elyria, Ohio
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Rock-Ola Mfg. Corp., 867 N. Kedzie Ave., Chicago, Ill.
Sillcox Radio & Television Corp., 70 Pine St., New York, N. Y.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Sundt Engineering Co., 4757 Ravenswood Ave., Chicago, Ill.
Talking Devices Co., 4451 W. Irving Park Rd., Chicago, Ill.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.

Chokes

POWER and AUDIO CHOKES

American Transformer Co., 178 Emmet St., Newark, N. J.
Arlavox Mfg. Co., 430 S. Green St., Chicago, Ill.
Audio Development Co., 2833 13th Ave., S., Minneapolis, Minn.
Chicago Transformer Corp., 3501 W. Addison St., Chicago, Ill.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Coto-Coil Co., 71 Willard Ave., Providence, R. I.
Doyle, Inc., James W., 311 N. Desplaines St., Chicago, Ill.
Ferranti Electric, Inc., 30 Rockefeller Plaza, New York, N. Y.
Freed Transformer Co., 72 Spring St., New York, N. Y.
General Transformer Corp., 1250 W. Van Buren St., Chicago, Ill.
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J.
Hollywood Transformer Co., 645 N. Martel Ave., Los Angeles, Cal.
International Transformer Co., 17 W. 20th St., New York, N. Y.
Jefferson Electric Co., Bellwood, Ill.
Kenyon Transformer Co., 840 Barry St., New York, N. Y.
Lectrohm, Inc., 5133 W. 25th Pl. (Cicero), Chicago, Ill.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass.
New York Transformer Co., 51 W. 3rd St., New York, N. Y.
Norwalk Transformer Corp., South Norwalk, Conn.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
RCA Mfg. Co., Camden, N. J.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
United Transformer Co., 150 Varick St., New York, N. Y.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.

R.F. CHOKES

Aladdin Radio Industries, Inc., 501 W. 35th St., Chicago, Ill.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Barber & Howard, Inc., East Ave., Westerly, R. I.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
Fast & Co., John E., 3101 N. Pulaski Ave., Chicago, Ill.
General Radio Co., 30 State St., Cambridge, Mass.
General Winding Co., 254 W. 31st St., New York, N. Y.
Guthman & Co., E. I., 400 S. Peoria St., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Lectrohm, Inc., 5133 W. 25th Pl. (Cicero), Chicago, Ill.
Meissner Mfg. Co., Mount Carmel, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
National Co., 61 Sherman St., Malden, Mass.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Sickles Co., F. W., Chicopee, Mass.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.

Clips

TEST and TUBE CLIPS

Alden Products Co., 117 Main St., Brockton, Mass.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Fahnestock Electric Co., 46-44 11th St., Long Island City, N. Y.
Goat Metal Stampings, Inc., 314 Dean St., Brooklyn, N. Y.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Micarta Fabricators, Inc., 4619 Ravenswood Ave., Chicago, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Mueller Electric Co., 1583 E. 31st St., Cleveland, Ohio
National Co., 61 Sherman St., Malden, Mass.
Smith, Herman, 180 Lafayette St., New York, N. Y.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Zierick Mfg. Corp., 385 Gerard Ave New York, N. Y.

Coils

POWER and A. F. COILS and WINDINGS

Acme Wire Co., 1255 Dixwell Ave., New Haven, Conn.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Barber & Howard, Inc., East Ave., Westerly, R. I.
Barker & Williamson, 235 Fairfield Ave., Upper Darby, Pa.
Best Mfg. Co., 1200 Grove St., Irvington, N. J.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
Coto-Coil Co., 71 Willard Ave., Providence, R. I. (See page 159.)
Dano Electric Co., 93 Main St., Winsted, Conn.
Davis & Co., Dean W., 549 W. Fulton St., Chicago, Ill.
Dinion Coil Co., 1 North St., Caledonia, N. Y. (See page 175.)
Doyle, Inc., James W., 311 N. Desplaines St., Chicago, Ill.

Sprague Specialties Co., 189 Beaver St., North Adams, Mass.
Technical Appliance Corp., 516 W. 34th St., New York, N. Y
Tefft Radio Co., Plymouth, Mich.
Webber Co., Earl, 4358 W. Roosevelt Rd., Chicago, Ill.
Whisk Laboratories, 145 W. 45th St., New York, N. Y.

Finishes

INSULATING ENAMELS

Alden Products Co., 117 Main St., Brockton, Mass.
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Maas & Waldstein Co., 438 Riverside Ave., Newark, N. J. (See page 148.)
Roxalin Flexible Lacquer Co., Elizabeth, N. J.
Stangard Products Co., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.

INSULATING VARNISH

Arco Co., 7301 Bessemer Ave., Cleveland, Ohio
Bakelite Corp., 30 E. 42d St., New York, N. Y.
Benolite Corp., Manor, Pa.
Day & Co., James B., 1872 Clybourn Ave., Chicago, Ill.
Dielectric Corp., 5520 Clemens St., St. Louis, Mo.
Dolph Co., John C., 168A Emmett St., Newark, N. J.
Electric Power Construction, Inc., 569 S. Main St., Akron, Ohio
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
George Co., P. D., 4153 Bingham Ave., St. Louis, Mo.
Hilo Varnish Corp., 42 Stewart Ave., Brooklyn, N. Y.
Impervious Varnish Co., Rochester, Pa.
Industrial Paint Co., Haysville, Pa.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Irvington Varnish & Insualtor Co., 10 Argyle Terrace, Irvington, N. J. (See page 106.)
Kay & Ess Co., Leo & Kiser Sts., Dayton, Ohio
Lastik Products Co., American Bank Bldg., Pittsburgh, Pa.
Maas and Waldstein, 438 Riverside Ave., Newark, N. J. (See page 148.)
Makalot Corp., 262 Washington St., Boston, Mass.
Mica Insulator Co., 200 Varick St., New York, N. Y.
Mitchell-Rand Insulation Co., 51 Murray St., New York, N. Y.
Murphy Varnish Co., 224 McWhorter St., Newark, N. J.
Ohmlac Paint & Refining Co., 6540 S. Central St., Chicago, Ill.
Robertson Chemical Co., 9808 Meech Ave., Cleveland, Ohio
Schenectady Varnish Co., Congress St., Schenectady, N. Y.
Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland, Ohio
Standard Insulation Co., 74 Paterson Ave., East Rutherford, N. J.
Standard Varnish Works, 2600 Richmond Terrace, Staten Island, N. Y.
Sterling Varnish Co., Haysville, Pa.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Zophar Mills, Inc., 118-26th St., Brooklyn, N. Y.

LACQUER FINISHES

Airose Chemical Co., Providence, R. I.
Arco Co., 7301 Bessemer Ave., Cleveland, Ohio
Ault & Wiborg Corp., 75 Varick St., New York, N. Y.
Bakelite Corp., 30 E. 42d St., New York, N. Y.
Berry Bros., Inc., 211 Leib St., Detroit, Mich.
Day & Co., James B., 1872 Clybourn Ave., Chicago, Ill.
du Pont de Nemours & Co., E. I., 626 Schuyler Ave., Arlington, N. J.
Durez Plastics & Chemicals, Inc., 1922 Walck Road, North Tonawanda, N. Y.
Egyptian Lacquer Mfg. Co., 1270 Sixth Ave., New York, N. Y.
Ferro Enamel Corp., 4150 E. 56th St., Cleveland, Ohio
Franklin Paint & Varnish Co., Benjamin, 4820 Langdon St., Philadelphia, Pa.
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.
Glidden Co., 11100 Glidden Ave., Cleveland, Ohio
Haynes Laboratories, Inc., C. W., Chandler St., Springfield, Mass.
Hilo Varnish Corp., 42 Stewart Ave., Brooklyn, N. Y.
Jones-Dabney Co., Smith & Proback Sts., Louisville, Ky.
Kay & Ess Co., Leo & Kiser Sts., Dayton, Ohio
Larkin Co., 680 Seneca St., Buffalo, N. Y.
Lily Varnish Co., 670 S. California St., Indianapolis, Ind.
Lowe Brothers Co., 436 E. Third St., Dayton, Ohio
Maas & Waldstein Co., 438 Riverside Ave., Newark, N J. (See page 148.)
Makalot Corp., 262 Washington St., Boston, Mass.
Masury & Son, John W., 50 Jay St., Brooklyn, N. Y.
Monsanto Chemical Co., Plastics Div., Springfield, Mass.
Murphy Varnish Co., 224 McWhorter St., Newark, N. J.
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
New Wrinkle, Inc., Mutual Home Bldg., Dayton, Ohio
Pierce & Stevens, Inc., Swing St., Buffalo, N. Y.
Pittsburgh Plate Glass Co., Grant Bldg., Pittsburgh, Pa.
Pratt & Lambert, Inc., 92 Tonawanda St., Buffalo, N. Y.
Roxalin Flexible Lacquer Co., 802 Magnolia Ave., Elizabeth, N. J.
Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland, Ohio
Stanley Chemical Co., East Berlin, Conn.
Walker Co., H. V., 714 Division St., Elizabeth, N. J.
Watson-Standard Co., 225 Galveston St., Pittsburgh, Pa.
Zapon Div., Atlas Powder Co., Ludlow St., Stamford, Conn.

Forms

COIL FORMS

Alden Products Co., 117 Main St., Brockton, Mass.
American Lava Corp., Kruesi Bldg., Chattanooga, Tenn.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
Corning Glass Works, Corning, N. Y.
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
Fast & Co., John E., 3101 N. Pulaski Ave., Chicago, Ill.
General Ceramics & Steatite Corp., Keasbey, N. J.
General Winding Co., 254 W. 31st St., New York, N. Y.
Guthman & Co., E. I., 400 S. Peoria St., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Insuline Corp. of America 30-30 Northern Blvd., Long Island City, N. Y.
Isolantite, Inc., 343 Cortlandt St., Belleville, N. J.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
National Co., 61 Sherman St., Malden, Mass.
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
Paramount Paper Tube Co., 801 Glasgow Ave., Fort Wayne, Ind.
Precision Paper Tube Co., 2033 W. Charleston St., Chicago, Ill.
Zierick Mfg. Corp., 385 Gerard Ave., New York, N. Y.

Fuses

INSTRUMENT FUSES

Bussmann Mfg. Co., University at Jefferson, St. Louis, Mo.
Chase-Shawmut Co., Newburyport, Mass.
Littelfuse, Inc., 4755 Ravenswood Ave., Chicago, Ill. (See page 155.)
Meter Devices Co., 1001 Prospect Ave., S. W., Canton, Ohio

Generators

DYNAMOTORS, ROTARY CONVERTERS

Bodine Electric Co., 2262 W. Ohio St., Chicago, Ill.
Carter Motor Co., 1608 Milwaukee Ave., Chicago, Ill. (See page 158.)
Delco Appliance Div., General Motors Corp., 391 Lyell Ave., Rochester, N. Y.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Diehl Mfg. Co., Trumbell & First Sts., Elizabethport, N. J.
Eclipse Aviation Div. of Bendix Aviation Corp., Bendix, N. J.
Eicor, Inc., 1060 W. Adams St., Chicago, Ill. (See page 168.)
Electric Specialty Co., 211 South St., Stamford, Conn.
General Electric Co., Schenectady, N. Y.
Janette Mfg. Co., 558 W. Monroe St., Chicago, Ill.
Kato Engineering Co., 530 N. Front St., Mankato, Minn.
Pioneer Gen-E-Motor Corp., 5841 W. Dickens Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
United Engineering Co., 655 N. May St., Chicago, Ill.

ELECTRIC POWER PLANTS

Delco Appliance Div., General Motors Corp., 391 Lyell Ave., Rochester, N. Y.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Eicor, Inc., 1060 W. Adams St., Chicago, Ill.
Electric Specialty Co., 211 South St., Stamford, Conn.
Janette Mfg. Co., 558 W. Monroe St., Chicago, Ill.
Kato Engineering Co., 530 N. Front St., Mankato, Minn.
Midco Mfg. & Distributing Co., S. 13th & Kentucky Ave., Sheboygan, Wis.
Onan & Sons, D. W., 43 Royalston Ave., Minneapolis, Minn.
Pioneer Gen-E-Motor Corp., 5841 W. Dickens Ave., Chicago, Ill. (See page 152.)
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
Wincharger Corp., Sioux City, Ia. (See page 140.)

Geophones

see also Geophysical Apparatus

Geophysical Instrument Co., 1315 Half St., S. E., Washington, D. C.
Globe Phone Mfg. Corp., Reading, Mass.
Heiland Research Corp., Club Bldg., Denver, Col.

Graphite

COLLOIDAL GRAPHITE

Acheson Colloids Corp., Port Huron, Mich.
Asbury Graphite Mills, Asbury, N. J.
Grafo Colloids Corp., Sharon, Pa.
Superior Flake Graphite Co., First National Bank Bldg., Chicago, Ill.

Harnesses

WIRE HARNESSES

Alden Products Co., 117 Main St., Brockton, Mass.
Alpha Wire Corp., 50 Howard St., New York, N. Y.
Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
Lewyt Metal Products Co., 60 Broadway, Brooklyn, N. Y.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
R. B. M. Mfg. Co., Div. Essex Wire Corp., Logansport, Ind.
Rupp's Assembling & Mfg. Works, 2341 N. Seminary Ave., Chicago, Ill.
Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn, N. Y.

Headphones

CRYSTAL HEADPHONES

Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio. (See p. 22.)
Connecticut Telephone & Electric Co., 70 Britannia St., Meriden, Conn.
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.

Crystals

QUARTZ CRYSTALS and HOLDERS

Bausch & Lomb Optical Co., 635 St. Paul St., Rochester, N. Y.
Bellefonte Engineering Laboratories, Bellefonte, Pa.
Bliley Electric Co., Erie, Pa. (See p. 154.)
Burnett, Wm. W. L., 4814 Idaho St., San Diego, Cal.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co. New York, N. Y.)
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass.
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Hipower Crystal Co., 2035 W. Charleston St., Chicago, Ill. (See page 181.)
Hollister Crystal Co., Merriam, Kan.
Hunt & Sons, G. C., Carlisle, Pa.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Miller, August E., 9226 Hudson Blvd., North Bergen, N. J.
Petersen Radio Co., 2800 W. Broadway, Council Bluffs, Iowa
Precision Crystal Laboratories, 1211 Liberty St., Springfield, Mass.
Precision Piezo Service, 427 Asia St., Baton Rouge, La.
Premier Crystal Laboratories, Inc., 63 Park Row, New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Scientific Radio Service, 4301 Sheridan St., University Park, Hyattsville, Md.
Standard Piezo Co., W. Louther & Cedar Sts., Carlisle, Pa.
Universal Television System, 114 W. 18th St., Kansas City, Mo.
Valpey Crystals, Holliston, Mass.
Western Electric Co.—see Graybar Electric Co.
Zeiss, Inc., Carl, 485 Fifth Ave., New York, N. Y.

ROCHELLE SALT CRYSTALS

Tibbetts Laboratories, 179 Fifth St., Cambridge, Mass.

TOURMALINE CRYSTALS

Fuess, Inc., R., 39 W. 60th St., New York, N. Y.
Premier Crystal Laboratories, Inc., 63 Park Row, New York, N. Y.
Zeiss, Inc., Carl, 485 Fifth Ave., New York, N. Y.

Dials

See also Knobs, Pointers

Alden Products Co., 117 Main St., Brockton, Mass.
American Emblem Co., Utica, N. Y.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bastian Bros. Co., 1600 N. Clinton Ave., Rochester, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Coto-Coil Co., 71 Willard Ave., Providence, R. I.
Crowe Name Plate & Mfg. Co., 3701 Ravenswood Ave., Chicago, Ill.
Daven Co., 158 Summit St., Newark, N. J.
Emeloid Co., 291 Laurel Ave., Arlington, N. J.
Flock Process Corp., 17 W. 31st St., New York, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Grammes & Sons, Inc., L. F., 366 Union St., Allentown, Pa.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Meissner Mfg. Co., Mount Carmel, Ill.
Mica Insulator Co., 200 Varick St., New York, N. Y.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass. (See page 158.)
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
Parisian Novelty Co., Western Ave. at 35th St., Chicago, Ill.
Premier Crystal Laboratories, Inc., 55 Park Row, New York, N. Y.
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Sillcocks-Miller Co., 10 Parker Ave., W. South Orange, N. J.

Discs

BLANK RECORDING DISCS

Advance Recording Products Co., 36-12 34th St., Long Island City, N. Y. (See page 177.)
Allied Recording Products Co., 21-09 43d Ave., Long Island City, N. Y. (See page 160.)
Arrow Radio Co., 900 W. Jackson Blvd., Chicago, Ill.
Audio Devices, Inc., 1600 Broadway, New York, N. Y. (See page 176.)
Cook, F. L., 606 Parkman Ave., Los Angeles, Cal.
Electrical Industries Mfg. Co., Red Bank, N. J.
Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York, N. Y.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Federal Recorder Co., Elkhart, Ind.
Galvin Mfg. Corp., 4545 W. Augusta Blvd., Chicago, Ill.
Gould-Moody Co., 395 Broadway, New York, N. Y. (See page 108.)
Hammermill Paper Co., Erie, Pa.
Home Recording Co., 9 E. 19th St., New York, N. Y.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Mirror Record Corp., 58 W. 25th St., New York, N. Y.
Musicraft Records, Inc., 242 W. 55th St., New York, N. Y.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Presto Recording Corp, 242 W. 55th St., New York, N. Y. (See page 144.)
Radio Specialties Co., 1956 S. Figueroa St., Los Angeles, Cal.
Rangertone, Inc., 201 Verona Ave., Newark, N. J.
RCA Mfg. Co., Camden, N. J.
Recordisc Corp., 395 Broadway, New York, N. Y.
Stangard Products Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Talking Devices Co., 4451 Irving Park Rd., Chicago, Ill.
United States Record Corp., 1780 Broadway, New York, N. Y.
Warner Co., J. J., 1244 Larkin St., San Francisco, Cal.
Wilcox-Gay Corp., Charlotte, Mich.
Zephyr Products Co., 160 E. 116th St., New York, N. Y.

Dividers

VOLTAGE DIVIDERS—see Resistors

Dynamotors

see Generators

Enamels

see Finishes

Equalizers

see Filters

Escutcheons

see also Dials, Scales

Alden Products Co., 117 Main St., Brockton, Mass.
American Emblem Co., Utica, N. Y.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Crowe Name Plate & Mfg. Co., 3701 Ravenswood Ave., Chicago, Ill.
Daven Co., 158 Summit St., Newark, N. J.
Davies Molding Co., Harry, 1428 N. Wells St., Chicago, Ill.
Dual Remote Control Co., 31776 W. Warren St., Wayne, Mich.
Erie Resistor Corp., Erie, Pa.
Gemloid Corp., 79-10 Albion Ave., Elmhurst, N. Y.
Grammes & Sons, Inc., L. F., 366 Union St., Allentown, Pa.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Liberty Engraving & Mfg. Co., 2911 S. Central Ave., Los Angeles, Cal.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Stewart Mfg. Corp., F. W., 4311 Ravenswood Ave., Chicago, Ill.
Syracuse Ornamental Co., Syracuse, N. Y.
United Motors Service, 3044 W. Grand Blvd., Detroit, Mich.
White Dental Mfg. Co., S. S., 10 E. 40th St., New York, N. Y.

Fibre

see Insulation

Filters

ELECTRIC WAVE SECTION FILTERS

Audio Development Co., 2833 13th Ave., S., Minneapolis, Minn. (See page 170.)
Bliley Electric Co., Erie, Pa.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
General Radio Co., 30 State St., Cambridge, Mass.
United Transformer Co., 150 Varick St., New York, N. Y.
Western Instrument Co., 5115 Kinsie St., Los Angeles, Cal.

EQUALIZER FILTERS

American Transformer Co., 178 Emmet St., Newark, N. J.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Hollywood Transformer Co., 645 N. Martel Ave., Los Angeles, Cal.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill. (See p. 130.)
United Transformer Co., 150 Varick St., New York, N. Y.

NOISE FILTERS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Atlas Condenser Products Co., 548 Westchester Ave., New York, N. Y.
Bendix Aviation, Ltd., North Hollywood, Cal.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio
Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J.
Deutschmann Corp., Tobe, Canton, Mass.
Electronic Transformer Co., 515 W. 29th St., New York, N. Y.
Electro Products Laboratories, 549 W. Randolph St., Chicago, Ill.
Ferranti Electric, Inc., 30 Rockefeller Plaza, New York, N. Y.
Ferris Instrument Corp., Boonton, N. J.
General Winding Co., 254 W. 31st St., New York, N. Y.
Girard-Hopkins, 1437 23d Ave., Oakland, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Meissner Mfg. Co., Mt. Carmel, Ill.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Philmore Mfg. Co., 113 University Pl., New York, N. Y.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Slayter Electronic Div., Owens-Corning Fiberglas Corp., 26 W. Market St., Newark, Ohio.
Solar Mfg. Corp., Bayonne, N. J.

Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Corning Glass Works, Corning, N. Y.
Fleron & Son, Inc., M. M., 113 N. Broad St., Trenton, N. J.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Isolantite, Inc., 343 Cortlandt St., Belleville, N. J. (See page 105.)
Johnson Co., E. F., Waseca, Minn. (See page 96.)
Lapp Insulator Co., 31 Gilbert St., Le Roy, N. Y. (See page 35.)
Locke Insulator Corp., S. Charles & Cromwell Sts., Baltimore, Md.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
National Co., 61 Sherman St., Malden, Mass.

MAST FOOTING and TOWER INSULATORS

Lapp Insulator Co., 31 Gilbert St., Le Roy, N. Y.
Locke Insulator Corp., Baltimore, Md.

Inverters

American Television & Radio Corp., 300 E. Fourth St., St. Paul, Minn.
Electrical Products Co., 6535 Russell St., Detroit, Mich.
Electronic Laboratories, Indianapolis, Md. (See page 32.)

Jacks

see also Plugs

American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
Arrow-Hart & Hegeman Electric Co., 103 Hawthorne St., Hartford, Conn.
Audio Development Co., 2833 13th Ave S., Minneapolis, Minn. (See page 170.)
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Carter Radio Co., 812 Orleans St., Chicago, Ill.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Fahnestock Electric Co., 46-44 11th St., Long Island City, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Mallory & Co., P. R. 3029 E. Washington St., Indianapolis, Ind.
Smith, Herman, 180 Lafayette St., New York, N. Y.
Standard Electric Mfg. Co., 925 Wrightwood Ave., Chicago, Ill.
Technical Appliance Corp., 516 W. 34th St., New York City.
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.
Yaxley Mfg. Div. Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.

Knobs

see Dials
also Pointers

Alden Products Co., 117 Main St., Brockton, Mass.
American Insulator Corp., New Freedom, Pa.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Crowe Name Plate & Mfg. Co., 3701 Ravenswood Ave., Chicago, Ill.
Daven Co., 158 Summit St., Newark, N. J.
Davies Molding Co., Harry, 1428 N. Wells St., Chicago, Ill.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Emeloid Co., 291 Laurel Ave., Arlington, N. J.
Gemloid Corp., 79-10 Albion Ave., Elmhurst, N. Y.
General Electric Co., Plastics Dept., 1 Plastics Ave., Pittsfield, Mass.
General Radio Co., 30 State St., Cambridge, Mass.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Meissner Mfg. Co., Mount Carmel, Ill.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass.
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Radio City Products Co., 88 Park Pl., New York, N. Y.
Radio Knob Co., 4916 W. Grand Ave., Chicago, Ill.
Richardson Co., 27th & Lake Sts., Melrose Park, Ill.
Rogen Brothers, 2001 S. Michigan Ave., Chicago, Ill.
Sillcocks-Miller Co., 10 Parker Ave., W., South Orange, N. J.
Syracuse Ornamental Co., Syracuse, N. Y.

Lacquer

see Finishes

Laminations

see Stampings

Lamps

DIAL LAMPS

Alden Products Co., 117 Main St., Brockton, Mass.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Carlton Lamp Corp., 811 30th St., Union City, N. J.
Cinch Mfg. Corp., 2335 W. Van Buren St., Chicago, Ill.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
National Union Radio Corp., 15 Washington St., Newark, N. J.
Tung-Sol Lamp Works, Inc., 95 Eighth Ave., Newark, N. J.

PILOT LIGHTS

Alden Products Co., 117 Main St., Brockton, Mass.
Arrow-Hart & Hegeman Electric Co., 103 Hawthorne St., Hartford, Conn.
Bryant Electric Co., 1421 State St., Bridgeport, Conn.
Circle F Mfg. Co., 720 Monmouth St., Trenton, N. J.
Dial Light Co. of America, Inc., 92 West St., New York, N. Y. (See page 181.)
Drake Mfg. Co., 1713 W. Hubbard St., Chicago, Ill. (See page 155.)
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn.
Hubbell, Inc., Harvey, State St. & Bostwick Ave., Bridgeport, Conn.
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Kirkland Co., H. R., Morristown, N. J.
Pass & Seymour, Inc., Solvay Station, Syracuse, N. Y.
Signal Indicator Co., 140 Cedar St., New York, N. Y. (See page 181.)
Tingstol Corp., 1461 W. Grand Ave., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Lines

COAXIAL LINES
see Cable

Locknuts

see Nuts

Loudspeakers

Altec Lansing Corp., 6900 McKinley Ave., Los Angeles, Cal.
American Communications Corp., 306 Broadway, New York, N. Y.
Arlavox Mfg. Co., 430 S. Green St., Chicago, Ill.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Best Mfg. Co., 1200 Grove St., Irvington, N. J.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
Cinaudagraph Speakers, Inc., 3929 S. Michigan, Ave., Chicago, Ill.
Crescent Industries, Inc., 4140 Belmont Ave., Chicago, Ill.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Fibre Form, Inc., 300 S. Washington St., Columbia City, Ind.
Fulton Radio Co., 100 Sixth Ave., New York, N. Y.
Gates Companies, Quincy, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hawley Products Co., St. Charles, Ill.
Jensen Radio Mfg. Co., 6601 S. Laramie Ave., Chicago, Ill.
Leotone Radio Co., 63 Dey St., New York, N. Y.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Miles Reproducer Co., 812 Broadway, New York, N. Y.
Million Radio & Television Laboratories, 1617 N. Damen St., Chicago, Ill.
National Co., 61 Sherman St., Malden, Mass.
Newcomb Audio Products Co., 2815 S. Hill St., Los Angeles, Cal.
Operadio Mfg. Co., 13th & Indiana Sts., St. Charles, Ill.
Oxford Tartak Radio Corp., 915 W. Van Buren St., Chicago, Ill.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Permoflux Corp., 4916 W. Grand Ave., Chicago, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Philmore Mfg. Co., 113 University Pl., New York, N. Y.
Quam-Nichols Co., 33d Pl. & Cottage Grove Ave., Chicago, Ill.
Racon Electric Co., 52 E. 19th St., New York, N. Y.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
Radio Speakers, Inc., 221 E. Cullerton St., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Rola Co., 2530 Superior Ave., Cleveland, Ohio
Rowe Industries, 3120 Monroe St., Toledo, Ohio
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Tibbetts Laboratories, 179 Fifth St., Cambridge, Mass.
University Laboratories, 195 Chrystie St., New York, N. Y.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Vac-O-Grip Co., 2023 Detroit Ave., Toledo, Ohio
Western Electric Co.—see Graybar Electric Co.
Wright-Decoster, Inc., 2233 University Ave., St. Paul, Minn.

Lugs

TERMINAL LUGS

Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Burndy Engineering Co., 459 E. 133d St., New York, N. Y.
Cinch Mfg. Corp., 2335 W. Van Buren St., Chicago, Ill.
Dante Electric Mfg. Co., Bantam, Conn.
Dossert & Co., 242 W. 41st., New York, N. Y.
Eastern Specialty Co., 3617-19 N. Eighth St., Philadelphia, Pa.
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill.
Franklin Mfg. Corp., A. W., 175 Varick St., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Grammes & Sons, Inc., L. F., 344 Union St., Allentown, Pa.

DYNAMIC HEADPHONES

Carrier Microphone Co., 439 S. La Brea Ave., Inglewood, Cal.
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.

MAGNETIC HEADPHONES

Cannon Co., C. F., Springwater, N. Y.
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
Chicago Telephone Supply Co., 1142 W. Beardsley Ave., Elkhart, Ind.
Connecticut Telephone & Electric Co., 70 Britannia St., Meriden, Conn.
Electrical Industries Mfg. Co., Red Bank, N. J.
General Electric Co., Plastics Dept., 1 Plastics Ave., Pittsfield, Mass.
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Murdock Mfg. Co., Chelsea, Mass. (See page 127.)
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
RCA Mfg. Co., Camden, N. J.
Trimm Radio Mfg. Co., 1770 W. Berteau Ave., Chicago, Ill.
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.

Holders

CRYSTAL HOLDERS—see Crystals

Horns

SPEAKER PROJECTOR HORNS

Altec Lansing Corp., 6900 McKinley Ave., Los Angeles, Cal.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Castlewood Mfg. Co., 12th & Burnett, Louisville, Ky.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Erwood Sound Equipment Co., 223 W. Erie St., Chicago, Ill.
Graybar Electric Co., Lexington Ave., at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hawley Products Co., St. Charles, Ill.
Jensen Radio Mfg. Co., 6601 S. Laramie Ave., Chicago, Ill.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Million Radio & Television Laboratories, 167 N. Damen St., Chicago, Ill.
Operadio Mfg. Co., 13th Indiana Sts., St. Charles, Ill.
Oxford Tartak Radio Corp., 915 W. Van Buren St., Chicago, Ill.
Racon Electric Co., 52 E. 19th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn, N. Y.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
University Laboratories, 195 Chrystie St., New York, N. Y.
Western Electric Co.—see Graybar Electric Co.
Wright-Decoster, Inc., 2233 University Ave., St. Paul, Minn.

Insulation

See also Tubing, Finishes, Oil

BEAD INSULATION

American Lava Corp., Kruesi Bldg., Chattanooga, Tenn. (See page 47.)
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
Corning Glass Works, Corning, N. Y.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
Isolantite, Inc., 343 Cortlandt St., Belleville, N. J.
Martindale Electric Co., 1371 Hird Ave., Cleveland, Ohio
Saxonburg Potteries, Saxonburg, Pa.
Star Porcelain Co., 61 Muirhead Ave., Trenton, N. J.
Steward Mfg. Co., D. M., E. 36th St., Chattanooga, Tenn.

CERAMIC INSULATION

Akron Porcelain Co., Cory Ave. & Belt Line, Akron, Ohio
American Lava Corp., Kruesi Bldg., Chattanooga, Tenn. (See page 47.)
Ceramic Specialties Co., East Liverpool, Ohio
Colonial Insulator Co., 931 Grant St., Akron, Ohio
Cook Ceramic Mfg. Co., 500 Prospect St., Trenton, N. J.
General Ceramics Co., Radio City, New York, N. Y. (See page 41.)
General Porcelain Co., 951 Pennsylvania Ave., Trenton, N. J.
Hartford Faience Co., 271 Hamilton St., Hartford, Conn.
Illinois Electric Porcelain Co., Macomb, Ill.
Imperial Porcelain Works, Inc., Mulberry St. & New York Ave., Trenton, N. J.
Isolantite, Inc., 343 Cortlandt St., Belleville, N. J. (See page 105.)
Knox Porcelain Corp., 200 Mynderse Ave., Knoxville, Tenn.
Lapp Insulator Co., 31 Gilbert St., Le Roy, N. Y. (See page 35.)
Locke Insulator Corp., S. Charles & Cromwell Sts., Baltimore, Md.
McDanel Refractory Porcelain Co., Beaver Falls, Pa.
Metsch Refractories Co., East Liverpool, Ohio
Mycalex Corp. of America, 7 E. 42d St., New York, N. Y. (See page 132.)
Porcelain Insulator Corp., 123 E. Main St., Lima, N. Y.
Porcelain Products, Inc., Parkersburg, W. Va.
Porcelier Mfg. Co., Greensburg, Pa.
Saxonburg Potteries, Saxonburg, Pa.
Square D Co., 6060 Rivard St., Detroit, Mich.
Star Porcelain Co., 61 Muirhead Ave., Trenton, N. J.
Thomas & Sons Co., R., Lisbon, Ohio
Union Electrical Porcelain Works, Trenton, N. J.
Universal Clay Products Co., 1505 E. First St., Sandusky, Ohio
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

FABRIC INSULATION

Acme Wire Co., New Haven, Conn.
B & C Insulation Products, Inc., 22 W. 21st St., New York, N. Y.
Brand & Co., William, 276 Fourth Ave., New York, N. Y.
Endurette Corp. of Am., Cliffwood, N. J.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Mica Insulator Co., 200 Varick St., New York, N. Y.
Nepperhan Sales Co., 175 Fifth Ave., New York, N. Y. (Sole Distributors for Vap-O-Lite Products Co., Astoria, N. Y.)
New Jersey Wood Finishing Co., Electrical Insulation Dept., Woodbridge, N. J.
Standard Insulation Co., 74 Paterson Ave., East Rutherford, N. J.
Vap-O-Lite Products Co.—see Nepperhan Sales Co.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

FIBRE INSULATION

Brandywine Fibre Products Co., N. Walnut St., Wilmington, Del.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Franklin Fibre-Lamitex Corp., 12th & French Sts., Wilmington, Del.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Lincoln Fibre & Specialty Co., Newport, Del.
National Vulcanized Fibre Co., Wilmington, Del. (See page 25.)
Penn Fibre & Specialty Co., 2030 E. Westmoreland St., Philadelphia, Pa.
Spaulding Fibre Co., 310 Wheeler St., Tonawanda, N. Y.
Taylor Fibre Co., Norristown, Pa. (See page 174.)
Wilmington Fibre Specialty Co., P. O. Box 944, Wilmington, Del.

GLASS INSULATION

Bentley, Harris Mfg. Co., Hector & Lime Sts., Conshohocken, Pa.
Brand & Co., William, 276 Fourth Ave., New York, N. Y.
Corning Glass Works, Corning, N. Y. (See page 120.)
Hope Webbing Co., Providence, R. I.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill. (See page 37.)
New Jersey Wood Finishing Co., Electrical Insulation Dept., Woodbridge, N. J.
Owens-Corning Fiberglas Corp., Nicholas Bldg., Toledo, Ohio

PAPER INSULATION

Acme Wire Co., 1255 Dixwell Ave., New Haven, Conn.
Brandywine Fibre Products Co., N. Walnut St., Wilmington, Del.
Case Bros., Highland Park, Conn.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Cottrell Paper Co., 19 Purchase St., Fall River, Mass.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Hartford City Paper Co., Hartford City, Ind.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill. (See page 37.)
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Lincoln Fibre & Specialty Co., Newport, Del.
Mica Insulator Co., 200 Varick St., New York, N. Y.
National Vulcanized Fibre Co., Wilmington, Del.
New Jersey Wood Finishing Co., Electrical Insulation Dept., Woodbridge, N. J.
Riegel Paper Corp., 342 Madison Ave., New York, N. Y.
Spaulding Fibre Co., 310 Wheeler St., Tonawanda, N. Y.
Standard Insulation Co., 74 Paterson Ave., East Rutherford, N. J.
Taylor Fibre Co., Norristown, Pa.
West Virginia Pulp & Paper Co., 230 Park Ave., New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wilmington Fibre Specialty Co., P. O. Box 944, Wilmington, Del.

PHENOLIC INSULATION

Celanese Celluloid Corp., 180 Madison Ave., New York, N. Y.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Dow Chemical Co, Midland, Mich.
Formica Insulation Co., 4662 Spring Grove Ave., Cincinnati, Ohio. (See page 9.)
Franklin Fibre-Lamitex Corp., 12th & French Sts., Wilmington, Del.
General Electric Co, Plastics Dept., 1 Plastics Ave., Pittsfield, Mass.
Goodyear Tire & Rubber Co., 1144 E. Market St., Akron, Ohio
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Mica Insulator Co., 200 Varick St., New York, N. Y.
Monsanto Chemical Co., Plastics Div., Springfield, Mass.
National Vulcanized Fibre Co., Wilmington, Del.
Orrsell Co., 64 E. Eighth St., New York, N. Y.
Panelyte Corp., 230 Park Ave., New York, N. Y.
Penn Fibre & Specialty Co., 2030 E. Westmoreland St., Philadelphia, Pa.
Plax Corp., Hartford, Conn.
Spaulding Fibre Co., 310 Wheeler St., Tonawanda, N. Y.
Synthane Corp., Oaks, Pa.
Taylor Fibre Co., Norristown, Pa.
Ucinite Co., 459 Watertown Ave., Newtonville, Mass
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wilmington Fibre Specialty Co., P. O. Box 944, Wilmington, Del.

Insulators

Alden Products Co., 117 Main St., Brockton, Mass.
American Lava Corp., Kruesi Bldg., Chattanooga, Tenn.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.

Ideal Clamp Mfg. Co., 202 Bradford St., Brooklyn, N. Y.
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
Ilsco Copper Tube & Products, Inc., 5629 Madison Rd., Cincinnati, Ohio
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Jones, Howard B., 2300 Wabansia Ave., Chicago, Ill.
Kliegl Bros. Universal Electric Stage Lighting Co., 321 W. 50th St., New York, N. Y.
Krueger & Hudepohl, 232-8 Vine St., Cincinnati, Ohio
Morse Co., Frank W., 301 Congress St., Boston, Mass.
Multi Electrical Mfg. Co., 1840 W. 14th St., Chicago, Ill.
Patton-MacGuyer Co., Baker St. & Virginia Ave., Providence, R. I.
Penn-Union Electric Corp., 315 State St., Erie, Pa.
Rajah Co., Locust Ave., Bloomfield, N. J.
Risdon Mfg. Co., Naugatuck, Conn.
Shain, Chas. D., 145 Beach, 119th St., Bell Harbor, N. Y.
Shakeproof, Inc., 2565 N. Keeler Ave., Chicago, Ill.
Sherman Mfg. Co., H. B., Battle Creek, Mich.
Square D Co., 6060 Rivard St., Detroit, Mich.
Stimpson Co., Edwin B., 74 Franklin Ave., Brooklyn, N. Y.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Thompson-Bremer & Co., 1640 W. Hubbard St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Zierick Mfg. Co., 385 Gerard Ave., New York, N. Y.

Magnesium

see Metals

Magnets

PERMANENT MAGNETS

Crucible Steel Co. of America, 405 Lexington Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Indiana Steel Products Co., 135 S. La Salle St., Chicago, Ill.
Taylor-Wharton Iron & Steel Co., Highbridge, N. J.
Thomas & Skinner Steel Products Co., 1120 E. 23d St., Indianapolis, Ind. (See page 171.)

Metals

ALUMINUM

Aluminum Co. of America, Gulf Bldg., Pittsburgh, Pa.

MAGNESIUM

American Magnesium Corp., 2210 Harvard Ave., Cleveland, Ohio
Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn, N. Y.
Bohn Aluminum & Brass Corp., Lafayette Bldg., Detroit, Mich.
Dow Chemical Co., Midland, Mich.

NICKEL

Apollo Metal Works, 6601 S. Oak Park Ave., Chicago, Ill.
General Plate Div., Metals & Controls Corp., 34 Forest St., Attleboro, Mass.
Ingersoll Steel & Disc Co., New Castle, Ind.
International Nickel Co., 67 Wall St., New York, N. Y.
Lukens Steel Co., Coatesville, Pa.
Riverside Metal Co., Riverside, N. J.
Superior Metal Corp., Clearing, Ill.

SPECIAL METALS

American Electro Metal Corp., 165 Broadway, New York, N. Y. (See page 114.)
American Platinum Works, New Jersey, R. R. Ave., at Oliver St., Newark, N. J.
Baker & Co., Murray & Austin Sts., Newark, N. J.
Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn, N. Y.
Bishop & Co., Platinum Works, J., 12 Channing Ave., Malvern, Pa.
Callite Tungsten Corp., 544 39th St., Union City, N. J. (See page 46.)
Cohn, Sigmund, 44 Gold St., New York, N. Y.
Cross, H., 15 Beekman St., New York, N. Y. (See page 181.)
William B. Driver Co., Newark, N. J. (See page 143.)
Fansteel Metallurgical Corp., 2200 Sheridan Rd., North Chicago, Ill.
General Plate Div., Metals & Controls Corp., 34 Forest St., Attleboro, Mass.
Handy & Harman, 82 Fulton St., New York, N. Y.
Independent Contact Mfg. Co., 540 39th St., Union City, N. J.
International Nickel Co., 67 Wall St., New York, N. Y.
J. M. Ney Co., Hartford, Conn.
Wilson Co., H. A., 105 Chestnut St., Newark, N. J.

STEEL, ELECTRICAL

Allegheny-Ludlum Steel Corp., Oliver Bldg., Pittsburgh, Pa.
American Rolling Mill Co., Curtis St., Middletown, Ohio
Carnegie-Illinois Steel Corp., Carnegie Bldg., Pittsburgh, Pa.
Empire Sheet & Tin Plate Co., N. Bowman St., Mansfield, Ohio
Follansbee Steel Corp., Third & Liberty Sts., Pittsburgh, Pa.
Granite City Steel Co., Granite City, Ill.
Newport Rolling Mill Co., Ninth & Lowell Sts., Newport, Ky.
Republic Steel Corp., Alloy Steel Div., Massillon, Ohio
Union Drawn Steel Div., Republic Steel Corp., Harsh Ave., S. E., Massillon, Ohio
Wheeling Steel Corp., Wheeling Steel Corp. Bldg., Wheeling, W. Va.
Youngstown Sheet & Tube Co., Stambaugh Bldg., Youngstown, Ohio

THERMOSTATIC METALS

Baker & Co., Murray & Austin Sts., Newark, N. J.
Brainin Co., C. S., 20 Van Dam St., New York, N. Y.
Callite Tungsten Corp., 544 39th St., Union City, N. J.
Chace Co., W. M., 1608 Beard Ave., Detroit, Mich.
Dole Valve Co., 1941 Carroll Ave., Chicago, Ill.
General Plate Div., Metals & Controls Corp., 34 Forest St., Attleboro, Mass.
Wilson Co., H. A., 105 Chestnut St., Newark, N. J. (See page 112.)

Mica

Asheville Mica Co., 5 River Rd., Biltmore, N. C.
Brand & Co., William, 276 Fourth Ave., New York, N. Y.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
English Mica Co., 220 E. 42d St., New York, N. Y.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Huse-Liberty Mica Co., 171 Camden St., Boston, Mass.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Macallen Co., 25 Macallen St., Boston, Mass.
Mica Co. of Canada (N. Y.), Inc., Massena, N. Y.
Mica Insulator Co., 200 Varick St., New York, N. Y. (See page 100.)
Mica Mfg. Co., Sperry Bldg., Brooklyn, N. Y.
Mica Products Mfg. Co., 139 Spring St., New York, N. Y.
Munsell & Co., Eugene, 200 Varick St., New York, N. Y.
New England Mica Co., Waltham, Mass.
New Hampshire Mica & Mining Co., Washington St., Keene, N. H.
Richardson Co., 27th & Lake Sts., Melrose Park, Ill.
Schoonmaker Insulation Co., A. O., 635 Greenwich St., New York, N. Y.
Southern Mica Co., Johnson City, Tenn.
Spruce Pine Mica Co., Spruce Pine, N. C.
Tar Heel Mica Co., Plumtree, N. C.
U. S. Mica Mfg. Co., 1521 Circle Ave., Forest Park, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Microphones

American Microphone Co., 1915 S. Western Ave., Los Angeles, Cal.
Amperite Co., 561 Broadway, New York, N. Y.
Astatic Corp., 830 Market St., Youngstown, Ohio. (See page 146.)
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio. (See page 22.)
Carrier Microphone Co., 439 S. La Brea Ave., Inglewood, Cal.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Electrical Industries Mfg. Co., Red Bank, N. J.
Electro Voice Mfg. Co., 1239 South Bend Ave., South Bend, Ind. (See p. 154.)
Galvin Mfg. Corp., 4545 W. Augusta Blvd., Chicago, Ill.
Gates Companies, Quincy, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
National-Dobro Corp., 400 S. Peoria St., Chicago, Ill.
Olson Mfg. Co., 362 Wooster Ave., Akron, Ohio
Operadio Mfg. Co., St. Charles, Ill.
Radio Speakers, Inc., 221 E. Cullerton St., Chicago, Ill.
Philmore Mfg. Co., 113 University Pl., New York, N. Y.
Permoflux Corp., 4916 W. Grand Ave., Chicago, Ill.
Rauland Corp., 4245 N. Knox Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Rowe Industries, Inc., 3120 Monroe St., Toledo, Ohio
Shure Bros., 225 W. Huron St., Chicago, Ill. (See page 40.)
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Tibbetts Laboratories, 179 Fifth St., Cambridge, Mass.
Turner Co., 909 17th St., N.E., Cedar Rapids, Iowa
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.
Western Electric Co.—see Graybar Electric Co.

Motor-Generators

see Generators

Motors

FRACTIONAL HORSEPOWER MOTORS

Air-Way Electric Appliance Corp., 2101 Auburn Ave., Toledo, Ohio
Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio
Allis Co., Louis, 427 E. Stewart St., Milwaukee, Wis.
Armor Electric Mfg. Co., 1020 Holland St., Erie, Pa.
Baldor Electric Co., 4370 Duncan Ave., St. Louis, Mo.
Barber-Colman Co., River & Loomis Sts., Rockford, Ill.
Black & Decker Electric Co., Kent, Ohio
Bodine Electric Co., 2262 W. Ohio St., Chicago, Ill.
B & R Mfg. Co., Toledo Factories Bldg., Toledo, Ohio
Brown-Brockmeyer Co., 1000 S. Smithville Rd., Dayton, Ohio
Burke Electric Co., 12th & Berry Sts., Erie, Pa.
Canatsey Electric Mfg. Co., 620 Wyandotte St., Kansas City, Mo.
Century Electric Co., 1806 Pine St., St. Louis, Mo.
Crocker-Wheeler Electric Mfg. Co., Ampere, N. J.
Delco Appliance Division, General Motors Corp., 391 Lyell Ave., Rochester, N. Y.
Delco Products Div., General Motors Corp., 329 E. First St., Dayton, Ohio
Diehl Mfg. Co., Trumbull & First Sts., Elizabethport, N. J.
Dumore Co., 14th & Racine Sts., Racine, Wis.

Electric Motor Corp., Racine, Wis.
Electric Specialty Co., 211 South St., Stamford, Conn.
Electro Dynamic Works of Electric Boat Co., Ave. A & North St., Bayonne, N. J.
Emerson Electric Mfg. Co., 1824 Washington Ave., St. Louis, Mo.
Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago, Ill.
Fidelity Electric Co., 332 N. Arch St., Lancaster, Pa.
Franklin Transformer Mfg. Co., 607 22d Ave., N. E., Minneapolis, Minn.
General Electric Co., Schenectady, N. Y.
Hansen Mfg. Co., Princeton, Ind.
Haydon Mfg. Co., Forrestville, Conn.
Heinze Electric Corp., Lowell, Mass.
Holtzer-Cabot Electric Co., 125 Amory St., Boston, Mass.
Howell Electric Motors Co., Howell, Mich.
Janette Mfg. Co., 558 W. Monroe St., Chicago, Ill.
Kendrick & Davis Co., Lebanon, N. H.
Kimble Electric Co., 2023 W. Hastings St., Chicago, Ill.
Kingston-Conley Electric Co., 68 Brook Ave., North Plainfield, N. J.
Leich Electric Co., Genoa, Ill.
Leland Electric Co., Dayton, Ohio
Marathon Electric Mfg. Corp., 32 Island St., Wausau, Wis.
Master Electric Co., 126 Davis Ave., Dayton, Ohio
Merkel-Korff Gear Co., 213 N. Morgan St., Chicago, Ill.
Motorstat Electric Corp., 5005 Euclid Ave., Cleveland, Ohio
Northwestern Electric Co., 408 S. Hoyne Ave., Chicago, Ill.
Ohio Electric Mfg. Co., 5900 Maurice Ave., Cleveland, Ohio
Peerless Electric Co., 740 W. Market St., Warren, Ohio
Redmond Co., A. G., Owosso, Mich.
Reliance Electric & Engineering Co., 1084 Ivanhoe Rd., Cleveland, Ohio
Reynolds Electric Co., 2650 W. Congress St., Chicago, Ill.
Robbins & Myers, 1345 Lagonda Ave., Springfield, Ohio
Russell Electric Co., 340 W. Huron St., Chicago, Ill.
Signal Electric Mfg. Co., 1915 Broadway, Menominee, Mich.
Smith Mfg. Co., F. A., Union at Augusta, Rochester, N. Y.
Speedway Mfg. Co., 1834 S. 52d Ave., (Cicero) Chicago, Ill.
Star Electric Motor Co., Bloomfield Ave. & Grove St., Bloomfield, N. J.
Sterling Electric Motors, Inc., Telegraph Rd. at Atlantic Blvd., Los Angeles, Cal.
Sturtevant Co., B. F., Hyde Park, Boston, Mass.
Sundt Engineering Co., 4759 Ravenswood Ave., Chicago, Ill.
Sunl[illegible] E[illegible]al Div., General Motors Corp., 523 Dana Ave., Warren, Ohio
U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles, Cal.
Valley Electric Corp., 4221 Forest Park Blvd., St. Louis, Mo.
Victor Electric Products, Inc., 2950 Robertson Ave., Cincinnati, Ohio
Wagner Electric Corp., 6400 Plymouth Ave., St. Louis, Mo.
Warren Telechron Co., Homer Ave., Ashland, Mass.
Wesche Electric Co., B. A., 1628 Vine St., Cincinnati, Ohio
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

PHONOGRAPH MOTORS

Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio
Diehl Mfg. Co., Trumbull & First Sts., Elizabethport, N. J.
Emerson Electric Mfg. Co., 1824 Washington Ave., St. Louis, Mo.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
General Electric Co., Schenectady, N. Y.
General Industries Co., 3537 Taylor St., Elyria, Ohio
RCA Mfg. Co., Camden, N. J.
Rotor Corp. of America, 10 Norwood St., Dayton, Ohio

Mountings

VIBRATION INSULATING MOUNTINGS

Armstrong Cork Co., 995 Concord St., Lancaster, Pa.
Firestone Tire & Rubber Co., 12 S. Main St., Akron, Ohio
Goodrich Co., B. F., 500 S. Main St., Akron, Ohio
Johns-Manville, 22 E. 40th St., New York, N. Y.
Korfund Co., 48-15 32d Pl., Long Island City, N. Y.
Lord Mfg. Co., 1635 W. 12th St., Erie, Pa. (See page 133.)
Vibration Eliminator Co., 25-08 37th Ave., Long Island City, N. Y.

Needles

CUTTING NEEDLES

Acton Co., H. W., 370 Seventh Ave., New York, N. Y.
Arrow Radio Co., 900 W. Jackson Blvd., Chicago, Ill.
Audio Devices, Inc., 1600 Broadway, New York, N. Y.
Capps Co., Frank L., 244 W. 49th St., New York, N. Y.
Cook, F. L., 606 Parkman Ave., Los Angeles, Cal.
Duotone Co., 799 Broadway, New York, N. Y.
Eldeen Co., 504 N. Water St., Milwaukee, Wis.
Electrical Industries Mfg. Co., Red Bank, N. J.
Electrovox Co., 169 Maplewood Ave., Maplewood, N. J.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Federal Recorder Co., Elkhart, Ind.
General Phonograph Co., Putnam, Conn.
Gerett Corp., M. A., 2947 N. 30th St., Milwaukee, Wis.
Gould-Moody Co., 395 Broadway, New York, N. Y.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Musicraft Records, Inc., 242 W. 55th St., New York, N. Y.
Paraloy Co., 600 S. Michigan Ave., Chicago, Ill.
Permo Products Corp., 6415 Ravenswood Ave., Chicago, Ill.
Pfanstiehl Chemical Co., 104 Lake View Ave., Waukegan, Ill.
Phonograph Needle Mfg. Co., 42 Dudley St., Providence, R. I.
Presto Recording Corp., 242 W. 55th St., New York, N. Y.
Rangertone, Inc., 73 Winthrop St., Newark, N. J.
RCA Mfg. Co., Camden, N. J.
Recordisc Corp., 395 Broadway, New York, N. Y.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.

PLAYING NEEDLES

Acton Co., H. W., 370 Seventh Ave., New York, N. Y.
Audio Devices, Inc., 1600 Broadway, New York, N. Y.
Cook, F. L., 606 Parkman Ave., Los Angeles, Cal.
Decca Records, Inc., 50 W. 57th St., New York, N. Y.
Duotone Co., 799 Broadway, New York, N. Y.
Eldeen Co., 504 N. Water St., Milwaukee, Wis.
Electrovox Co., 169 Maplewood Ave., Maplewood, N. J.
General Phonograph Co., Putnam, Conn.
Gerett Corp., M. A., 2947 N. 30th St., Milwaukee, Wis.
Gould-Moody Co., 395 Broadway, New York, N. Y.
Harris Mfg. Co., 2422 W. Seventh St., Los Angeles, Cal.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Lowell Needle Co., Putnam, Conn.
Mirror Record Corp., 58 W. 25th St., New York, N. Y.
Musicraft Records, Inc., 242 W. 55th St., New York, N. Y.
Music Master Mfg. Co., 508 S. Dearborn St., Chicago, Ill.
Paraloy Co., 600 S. Michigan Ave., Chicago, Ill.
Permo Products Corp., 6415 Ravenswood Ave., Chicago, Ill.
Pfanstiehl Chemical Co., 105 Lakeview Ave., Waukegan, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Phonograph Needle Mfg. Co., 42 Dudley St., Providence, R. I.
Presto Recording Corp., 242 W. 55th St., New York, N. Y.
Rangertone, Inc., 703 Winthrop St., Newark, N. J.
RCA Mfg. Co., Camden, N. J.
Recoton Corp., 21-10 49th St., Long Island City, N. Y.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Stangard Products Co., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.

Nickel

see Metals

Nuts

MACHINE SCREW NUTS

Arrow Automatic Products Corp., 29 Vestry St., New York, N. Y.
Barnes Co., Div. of Associated Spring Corp., Wallace, Bristol, Conn.
Bayonne Bolt Corp., Humphrey Ave. at Second St., Bayonne, N. J.
Blake & Johnson Co., 1495 Thomaston Ave., Waterville, Conn.
Chicago Screw Co., 1026 S. Homan Ave., Chicago, Ill.
Clark Bros. Bolt Co., Milldale, Conn.
Clendenin Bros., 108 South St., Baltimore, Md.
Cleveland Cap Screw Co., 2917 E. 79th St., Cleveland, Ohio
Continental Screw Co., New Bedford, Mass.
Corbin Screw Corp., High, Myrtle & Grove Sts., New Britain, Conn.
Detroit Plating Industries, 1043 Mt. Elliott, Detroit, Mich.
Elco Tool & Screw Corp., 1800 Broadway, Rockford, Ill.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Harper Co., H. M., 2630 Fletcher St., Chicago, Ill.
Hartford Machine Screw Co., 476 Capitol Ave., Hartford, Conn.
Haskel Mfg. Co., William H., 22 Commerce St., Pawtucket, R. I.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Lamson & Sessions Co., 1971 W. 85th St., Cleveland, Ohio
Line Material Co., 740 N. Second St., Milwaukee, Wis.
Mid-West Screw Products Co., Main & St. George Sts., St. Louis, Mo.
Milton Mfg. Co., Milton, Pa.
New England Screw Co., 109 Emerald St., Keene, N. H.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Pittsburgh Screw & Bolt Corp., 2719 Preble Ave., N. S., Pittsburgh, Pa.
Progressive Mfg. Co., 52 Norwood St., Torrington, Conn.
Reed & Prince Mfg. Co., Duncan Ave., Worcester, Mass.
Rhode Island Tool Co., 148 W. River St., Providence, R. I.
Rockford Bolt & Steel Co., 126 Mill St., Rockford, Ill.
Russell, Burdsall & Ward Bolt & Nut Co., Midland Ave., Port Chester, N. Y.
St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis, Mo.
Scovill Mfg. Co., 99 Mill St., Waterbury, Conn.
Sterling Bolt Co., 707 W. Van Buren St., Chicago, Ill.
Tinnerman Products, Inc., 2038 Fulton Rd., Cleveland, Ohio
United Screw & Bolt Corp., 2513 W. Culerton St., Chicago, Ill.
Western Automatic Machine Screw Co., 922 Foster Ave., Elyria, Ohio

SELF LOCKING NUTS

Automatic Nut Co., Lebanon, Pa.
Clark Bros. Bolt Co., Milldale, Conn.
Columbia Nut & Bolt Co., 945 Main St., Bridgeport, Conn.
Drake Lock-Nut Co., 2440 E. 75th St., Cleveland, Ohio
Elastic Stop Nut Corp., 2371 Vauxhall Rd., Union City, N. J. (See p. 149.)
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Industrial Lock Nut Co., South Hanover, Mass.
Palnut Co., 61 Cordier St., Irvington, N. J.
Pittsburgh Screw & Bolt Corp., 2719 Preble Ave., N. S., Pittsburgh, Pa.
Security Metal Products, Inc., 345 E. Kalamazoo Ave., Kalamazoo, Mich.
Standard Pressed Steel Co., Jenkintown, Pa.

Tinnerman Stove & Range Co., Speed Nut Div., 2042 Fulton Rd., Cleveland, Ohio

Oils

Insulating Oils

Cities Service Oil Companies, 60 Wall St., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Harris Oil Co., A. W., 326 S. Water St., Providence, R. I.
Houghton & Co., E. F., Third, American & Somerset Sts., Philadelphia, Pa.
Kehew-Bradley Co., 43 Purchase St., Boston, Mass.
National Refining Co., Hanna Bldg., Cleveland, Ohio
Pure Oil Co., 35 E. Wacker Drive, Chicago, Ill.
Robinson & Son Co., Wm. C., Caroline & Dock Sts., Baltimore, Md.
Sinclair Refining Co., 630 Fifth Ave., New York, N. Y.
Socony Vacuum Oil Co., 26 Broadway, New York, N. Y.
Standard Oil Co. (Indiana), 910 S. Michigan Ave., Chicago, Ill.
Sun Oil Co., 1608 Walnut St., Philadelphia, Pa.
Swan-Finch Oil Corp., 30 Rockefeller Plaza, New York, N. Y.
Texas Co., 135 E. 42d St., New York, N. Y.
Tide Water Associated Oil Co., 17 Battery Pl., New York, N. Y.
Waverly Oil Works Co., 54th St. & A. V. R.R., Pittsburgh, Pa.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Ovens

CRYSTAL OVENS

Burnett, Wm. W. L., 4814 Idaho St., San Diego, Cal.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Meissner Mfg. Co., Mt. Carmel, Ill.
Premier Crystal Laboratories, Inc., 63 Park Row, New York, N. Y.
Western Electric Co.—see Graybar Electric Co.

Photocells

see Tubes

Phototubes

see Tubes

Pickups

PHONOGRAPH PICKUPS

Astatic Corp., 830 Market St., Youngstown, Ohio. (See page 146.)
Audak Co., 500 Fifth Ave., New York, N. Y. (See page 184.)
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Decca Records, Inc., 50 W. 57th St., New York, N. Y.
Electrical Research Products, Inc., 76 Varick St., New York, N. Y.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Gabel Mfg. Co., John, 1200 W. Lake St., Chicago, Ill.
Garrard Sales Corp., 296 Broadway, New York, N. Y.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Miller Corp., Wm., 362 W. Colorado St., Pasadena, Cal.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Presto Recording Corp., 242 W. 55th St., New York, N. Y.
Proctor Co., B. A., 2 W. 45th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Shure Bros., 225 W. Huron St., Chicago, Ill.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Webster Electric Co., Racine, Wis.

MUSICAL INSTRUMENT PICKUPS

Rowe Industries, Inc., 3120 Monroe St., Toledo, Ohio
Vega Co., 155 Columbus Ave., Boston, Mass.

INDUSTRIAL PICKUPS

Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio

Plastics

BRANDING OF PLASTICS

Rogen Bros., 2003 S. Michigan Ave., Chicago, Ill.

MANUFACTURERS of PLASTICS

American Cyanamid Co., Plastics Div., 30 Rockefeller Plaza, New York, N. Y.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill. (See page 107.)
Bakelite Corp., 30 E. 42d St., New York, N. Y. (See page 26.)
Carbide & Carbon Chemicals Corp., 30 E. 42d St., New York, N. Y.
Catalin Corp., 1 Park Ave., New York, N. Y.
Celanese Celluloid Corp., 180 Madison Ave., New York. (See page 125.)
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
du Pont de Nemours & Co., E. I., 626 Schuyler Ave., Arlington, N. J.
Durez Plastics & Chemicals, Inc., 1922 Walck Rd., North Tonawanda, N. Y.
Durite Plastics, Div. Stokes & Smith Co., 5010 Summerdale Ave., Philadelphia, Pa.
Fiberloid Corp., Indian Orchard, Mass.
General Electric Co., Plastic Dept., 1 Plastics Ave., Pittsfield, Mass. (See page 129.)
Keasbey & Mattison Co., Butler Ave., Ambler, Pa.
Makalot Corp., 262 Washington St., Boston, Mass.
Monsanto Chemical Co., Plastics Div., Springfield, Mass.
Plaskon Co., 2112 Sylvan Ave., Toledo, Ohio
Reilly Tar & Chemical Corp., Merchants Bank Bldg., Indianapolis, Ind.
Synthane Corp., Oaks, Pa. (See page 17.)
Tennessee Eastman Corp., Kingsport, Tenn.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

MOLDERS of PLASTICS

Accurate Molding Corp., 116 Nassau St., Brooklyn, N. Y.
Alden Products Co., 117 Main St., Brockton, Mass.
American Insulator Corp., New Freedom, Pa.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill. (See page 107.)
Auburn Button Works, Inc., 48 Canoga St., Auburn, N. Y.
Bakelite Corp., 30 E. 42d St., New York, N. Y.
Boonton Molding Co., Boonton, N. J.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Breeze Corps., 24 S. Sixth St., Newark, N. J.
Chicago Molded Products Corp., 1020 N. Kolmar Ave., Chicago, Ill.
Cincinnati Moulding Co., 2037 Florence Ave., Cincinnati, Ohio
Cleveland Plastics, Inc., 12910 Taft Ave., Cleveland, Ohio
Colt's Patent Fire Arms Mfg. Co., Plastics Div., Hartford, Conn.
Consolidated Molded Products Corp., 409 Cherry St., Scranton, Pa.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Davies Molding Co., Harry, 1428 N. Wells St., Chicago, Ill.
Dayton Insulating Molding Co., 418 E. First St., Dayton, Ohio
Diemolding Corp., Rasbach St., Canastota, N. Y.
Emeloid Co., 291 Laurel Ave., Arlington, N. J. (See page 158.)
Erie Resistor Corp., 644 W. 12th St., Erie, Pa.
Franklin Fibre-Lamitex Corp., 12th & French Sts., Wilmington, Del.
Franklin Mfg. Corp., A. W., 175 Varick St., New York, N. Y.
Garfield Mfg. Co., Garfield, N. J.
Gemloid Corp., 79-10 Albion Ave., Elmhurst, N. Y.
General Electric Co., Plastics Dept., 1 Plastics Ave., Pittsfield, Mass. (See page 129.)
Imperial Molded Products Corp., 2925 W. Harrison St., Chicago, Ill.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Insulation Mfg. Co., 11 New York Ave., Brooklyn, N. Y.
Insulation Products Co., Richland St. & Annon Way, Pittsburgh, Pa.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Johns-Manville, 22 E. 40th St., New York, N. Y.
Keasby & Mattison Co., Butler Ave., Ambler, Pa.
Keystone Specialty Co., 1372½ Cove Ave., Cleveland, Ohio
Kuhn & Jacob Moulding & Tool Co., 1200 Southard St., Trenton, N. J.
Kurz-Kasch Co., 1415 S. Broadway, Dayton, Ohio
Mack Molding Co., Wayne, N. J.
Mica Insulator Co., 200 Varick St., New York N. Y.
Molded Insulation Co., 335 E. Price St., Philadelphia, Pa.
Monowatt Electric Corp., 570 Lexington Ave., New York, N. Y.
Niagara Insul-Bake Specialty Co., 483 Delaware Ave., Albany, N. Y.
Northern Industrial Chemical Co., 11 Elkins St., Boston, Mass.
Norton Laboratories, 1025 Mill St., Lockport, N. Y.
Oris Mfg. Co., Thomaston, Conn.
Plastic Molding Corp., Sandy Hook, Conn.
Recto Molded Products, Appleton St. & B. & O. R. R., Cincinnati, Ohio
Remler Co., 2101 Bryant St., San Francisco, Cal.
Reynolds Spring Co., Molded Plastics Div., Reynolds Bldg., Jackson, Mich.
Rogan Brothers, 2001 S. Michigan Ave., Chicago, Ill.
Royal Moulding Co., 69 Gordon Ave., Providence, R. I.
Siemon Co., State St. & Baum Blvd., Bridgeport, Conn.
Specialty Insulation Mfg. Co., Church St., Hoosick Falls, N. Y.
Stokes Rubber Co., Jos., Taylor & Webster Sts., Trenton, N. J.
Taylor Fibre Co., Norristown, Pa., (See Page 174.)
Tech-Art Plastics Co., 41-01 36th Ave., Long Island City, N. Y.
Terkelsen Machine Co., 326 A St., Boston, Mass.
Tingstol Corp., 1461 W. Grand Ave., Chicago, Ill.
Universal Molding Co., 16th & Vermont Sts., San Francisco, Cal.
Waterbury Button Co., 835 S. Main St., Waterbury, Conn.
Watertown Mfg. Co., 3 Porter St., Watertown, Conn.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wheeling Stamping Co., Wheeling, W. Va.

PLASTICS BRANDINGS

Rogan Bros., 2003 S. Michigan Ave., Chicago, Ill. (See page 142.)

Plugs

TERMINAL PLUGS

see also Jacks

Alden Products Co., 117 Main St., Brockton, Mass.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Audio Development Co., 1033 W. Van Buren St., Chicago, Ill.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Bud Radio, Inc, 2118 E. 55th St., Cleveland, Ohio
Cannon Electric Development Co., 3209 Humboldt St., Los Angeles, Cal. (See page 110.)
Cinch Mfg. Corp., 2335 W. Van Buren St., Chicago, Ill.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Electro Motive Mfg. Co., S. Park & John Sts., Willimantic, Conn.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Franklin Mfg. Corp., A. W., 175 Varick St., New York, N. Y.
General Electric Co., Plastics Dept., 1 Plastics Ave., Pittsfield, Mass.
General Radio Co., 30 State St., Cambridge, Mass.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.

Jones, Howard B., 2300 Wabansia Ave., Chicago, Ill. (See page 151.)
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Mallory & Co., P. R., 3029 E. Washington St, Indianapolis, Ind.
National Co., 61 Sherman St., Malden, Mass.
Pyle-National Co., 1334 N. Kostner Ave., Chicago, Ill.
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Waterbury Button Co., 835 S. Main St., Waterbury, Conn.

Pointers

DIAL POINTERS

see also Knobs
also Dials

American Emblem Co., Utica, N. Y.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Crowe Name Plate & Mfg. Co., 3701 Ravenswood Ave., Chicago, Ill.
Grammes & Sons, Inc., L. F., 366 Union St., Allentown, Pa.
Insuline Corp. of America, 30–30 Northern Blvd., Long Island City, N. Y.
Liberty Engraving & Mfg. Co., 2911 S. Central Ave., Los Angeles, Cal.
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
Radio City Products Co., 127 W. 26th St., New York, N. Y.

Points

CONTACT POINTS

American Electro Metal Corp., 165 Broadway, New York, N. Y.
American Platinum Works, New Jersey R. R. Ave. at Oliver St., Newark, N. J.
Baker & Co., 113 Astor St., Newark, N. J.
Bishop & Co., Platinum Works, J., 12 Channing Ave., Malvern, Pa.
Brainin Co., C. S., 20 Van Dam St., New York, N. Y. (See page 167.)
Callite Tungsten Corp., 544 39th St., Union City, N. J. (See page 46.)
Cleveland Tungsten, Inc., 10000 Meech Ave., Cleveland, Ohio
Fansteel Metallurgical Corp., 2200 Sheridan Rd., North Chicago, Ill.
General Electric Co., Schenectady, N. Y.
General Plate Div., Metals & Controls Corp., 34 Forest St., Attleboro, Mass.
General Tungsten Mfg. Co., 502 23d St., Union City, N. J.
Gibson Electric Co., 8350 Frankstown Ave., Pittsburgh, Pa.
Independent Contact Mfg. Co., 540 39th St., Union City, N. J.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind. (See page 50.)
Metroloy Co., 57 E. Alpine St., Newark, N. J. (See page 124.)
Paraloy Co., 600 S. Michigan Ave., Chicago, Ill. (See page 162.)
Tungsten Contact Mfg. Co., North Bergen, N. J.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wilson Co., H. A., 105 Chestnut St., Newark, N. J. (See page 112.)

Porcelain

see Insulation—Ceramic

Posts

BINDING POSTS and TERMINALS

Alden Products Co., 117 Main St., Brockton, Mass.
American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Cannon Electric Development Co., 3209 Humboldt St., Los Angeles, Cal.
Cinch Mfg. Corp., 2335 W. Van Buren St., Chicago, Ill. (See page 91.)
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Clare & Co., C. P., Lawrence & Lamon Aves., Chicago, Ill.
Doran & Sons, James C., 150 Chestnut St., Providence, R. I.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Fahnestock Electric Co., 46–44 11th St., Long Island City, N. Y.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Franklin Mfg. Corp., A. W., 175 Varick St., New York, N. Y.
Hoosick Falls Radio & Electrical Parts Mfg. Co., First St., Hoosick Falls, N. Y.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Jones, Howard B., 2300 Wabansia Ave., Chicago, Ill.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Manufacturers Screw Products, 216 W. Hubbard St., Chicago, Ill.
Meter Devices Co., 1001 Prospect Ave., S. W., Canton, Ohio
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Morse Co., Frank W., 301 Congress St., Boston, Mass.
Polk, J. L., 139 Maple Ave., Troy, N. Y.
States Co., 19 New Park Ave., Hartford, Conn.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.

Potentiometers

see also Controls

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Audio Products Co., 2101 S. Olive St., Burbank, Cal.
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland, Ohio
Bristol Co., Waterbury, Conn.
Brown Instrument Co., 4428 Wayne Ave., Philadelphia, Pa.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Daven Co., 158 Summit St., Newark, N. J.
DeJur Amsco Corp., Shelton, Conn. (See page 128.)
Dickson Co., 7420 Woodlawn Ave., Chicago, Ill.
Electronic Products Co., St. Charles, Ill.
Foxboro Co., Neponset Ave., Foxboro, Mass.
General Electric Co., Schenectady, N. Y.
J-B-T Instruments, Inc., 441 Chapel St., New Haven, Conn.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Lewis Engineering Co., Naugatuck, Conn.
Mason-Neilan Regulator Co., 1190 Adams St., Boston, Mass.
National Technical Laboratories, 820 Mission St., South Pasadena, Cal.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Spence Engineering Co., 53 Grant St., Walden, N. Y.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Taylor Instrument Companies, 100 Ames St., Rochester, N. Y.
Thwing-Albert Instrument Co., Penn St. & Pulaski Ave., Philadelphia, Pa.
Tech Laboratories, 7 Lincoln St., Jersey City, N. J.
Utah Radio Products Co., 820 N. Orleans St., Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

Rectifiers

see also Tubes

DRY DISC RECTIFIERS

American Television & Radio Corp., 300 E. 4th St., St. Paul, Minn.
Benwood Linze Co., 1815 Locust St., St. Louis, Mo. (See page 167.)
Electrical Products Co., 6535 Russell St., Detroit, Mich.
Fansteel Metallurgical Corp., 2200 Sheridan Rd., North Chicago, Ill.
General Electric Co., West Lynn, Mass.
International Telephone & Radio Mfg. Corp., 1000 Passaic Ave., Newark, N. J. (See page 42.)
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.

Regulators

see also Transformers
also Tubes

VOLTAGE REGULATORS and STABILIZERS

Acme Electric & Mfg. Co., 31 Water St., Cuba, N. Y.
Allis-Chalmers Mfg. Co., Milwaukee, Wis.
American Transformer Co., 178 Emmet St., Newark, N. J.
Burlington Instrument Corp., Burlington, Iowa
Clark Controller Co., 1146 E. 152d St., Cleveland, Ohio
Clarostat Mfg. Co., 287 N. Sixth St., Brooklyn, N. Y.
Eclipse Aviation Div. of Bendix Aviation Corp., Bendix, N. J.
Electronic Products Co., St. Charles, Ill.
Ferris Instrument Corp., Boonton, N. J.
Freed Transformer Co., 72 Spring St., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa.
Jones-Orme Co., 1645 Hennepin Ave., St. Paul, Minn.
Miller Co., Bertrand F., Trenton, N. J.
Norwalk Transformer Corp., South Norwalk, Conn.
Raytheon Mfg. Co., 190 Willow St., Waltham, Mass. (See page 150.)
RCA Mfg. Co., Camden, N. J.
Roller-Smith Co., Bethlehem, Pa.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Soin Electric Co., 2525 Clybourn Ave., Chicago, Ill. (See page 7.)
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.
Superior Electric Co., 32 Harrison St., Bristol, Conn. (See page 119.)
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill.
United Transformer Co., 150 Varick St., New York, N. Y. (See page 2.)
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.
Wirt Co., 5221 Greene St., Philadelphia, Pa.

Relays

HEAVY DUTY RELAYS

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
Allied Control Co., 227 Fulton St., New York, N. Y. (See page 164.)
American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill. (See page 177.)
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Automatic Switch Co., 41 E. 11th St., New York, N. Y.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
General Controls Co., 801 Allen Ave., Glendale, Cal.
General Electric Co., Schenectady, N. Y.
Hagan Corp., George J., 2400 E. Carson St., Pittsburgh, Pa.
H-B Electric Co., 2518 N. Broad St., Philadelphia, Pa.
Kurman Electric Co., 241 Lafayette St., New York, N. Y. (See page 104.)
Miller Co., Bertrand F., Trenton, N. J.
Monitor Controller Co., 51 S. Gay St., Baltimore, Md.
Penn Electric Switch Co., Goshen, Ind.
Philadelphia Thermometer Co., 917 Filbert St., Philadelphia, Pa.
Potter & Brumfield Mfg. Co., Princeton, Md.
Signal Engrg. & Mfg. Co., 154 W. 14th St., New York, N. Y.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
Zenith Electric Co., 845 S. Wabash St., Chicago, Ill.

MERCURY RELAYS

American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill. (See page 177.)
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Barber-Colman Co., Loomis & River Sts., Rockford, Ill.
Brown Instrument Co., 4428 Wayne Ave., Philadelphia, Pa.
Clare & Co., C. P., Lawrence & Lamon Aves., Chicago, Ill.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa. (See page 10.)
Durakool, Inc., 1010 N. Main St., Elkhart, Ind.
Guardian Electric Mfg. Co , 1621 W. Walnut St., Chicago, Ill. (See page 13.)
H-B Electric Co., 2518 N. Broad St., Philadelphia, Pa.
Mercoid Corp., 4201 Belmont Ave., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., 2712 Fourth Ave., S., Minneapolis, Minn.
Philadelphia Thermometer Co., 917 Filbert St., Philadelphia, Pa.
Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia, Pa.
Ward-Leonard Electric Co., 31 South St., Mount Vernon, N. Y. (See page 34.)
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

POLARIZED RELAYS

American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill. (See page 177.)
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa. (See page 10.)
Edison, Inc., Thoma A., Instrument Div., 51 Lakeside Ave., West Orange, N. J.
L A B Corp., Summit, N. J.
Miller Co., Bertrand F., Trenton, N. J.
Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia, Pa.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

SENSITIVE CONTROL RELAYS

Advance Electric Co., 1260 W. Second St., Los Angeles, Cal.
Allied Control Co., 227 Fulton St., New York, N. Y. (See page 164.)
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa. (See page 10.)
General Controls Co., 801 Allen Ave., Glendale, Cal.
General Electric Co., Schenectady, N. Y.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill. (See page 149.)
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill. (See p. 13.)
Kurman Electric Co., 241 Lafayette St., New York, N. Y. (See page 104.)
Potter & Brumfield Mfg. Co., Princeton, Ind.
Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia, Pa.
Sigma Instruments, Inc., 78 Freeport St., Boston, Mass. (See page 151.)
Signal Engrg. & Mfg. Co., 154 W. 14th St., New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

STEPPING RELAYS

Advance Electric Co., 1260 W. Second St., Los Angeles, Cal.
American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill. (See page 13.)
Roller-Smith Co., Bethlehem, Pa.

TELEPHONE RELAYS

Advance Electric Co., 1260 W. Second St., Los Angeles, Cal.
American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Clare & Co., C. P., Lawrence & Lamon Aves., Chicago, Ill.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
Kurman Electric Co., 241 Lafayette St., New York, N. Y. (See page 104.)
Leach Relay Co., 5915 Avalon Blvd., Los Angeles, Cal.
Western Electro-Mechanical Co., 300 Broadway, Oakland, Cal.

TIME DELAY RELAYS

Advance Electric Co., 1260 W. Second St., Los Angeles, Cal.
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
American Gas Accumulator Co., 1029 Newark Ave., Elizabeth, N. J.
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Autocall Co,. 1142 Tucker Ave., Shelby, Ohio
Automatic Temperature Control Co., 33 E. Logan St., Philadelphia, Pa.
Betts & Betts Corp., 551 W. 52d St., New York, N. Y.
Controls, Inc., Towaco, N. J.
Cramer Co., R. W., Centerbrook, Conn. (See page 169.)
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
Durakool, Inc., 1010 N. Main St., Elkhart, Ind.
Eagle Signal Corp., Moline, Ill.
Edison, Inc., Thomas A., Instrument Div., 51 Lakeside Ave., West Orange, N. J.
Electric Controller & Mfg. Co., 2701 E. 79th St., Cleveland, Ohio
Electronic Products Co., St. Charles, Ill.
Friez & Son, Julien P., 4 N. Central Ave., Baltimore, Md.
General Electric Co., Schenectady, N. Y.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill.
Industrial Engineering Equipment Co., 323 E. Fourth St., Davenport, Iowa
Monitor Controller Co., 51 S. Gay St., Baltimore, Md.
Photobell Corp., 116 Nassau St., New York, N. Y.
Precision Thermometer & Instrument Co., 1434 Brandywine St., Philadelphia, Pa.
Preferred Utilities Mfg. Corp., 31 West 60th St., New York, N. Y.
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
Signal Engrg. & Mfg. Co., 154 W. 14th St., New York, N. Y.
Spencer Thermostat Co., 1404 Forest St., Attleboro, Mass. (See page 111.)
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
White-Rodgers Electric Co., 1209 Cass Ave., St. Louis, Mo.
Zenith Electric Co., 845 S. Wabash St., Chicago, Ill.

VACUUM CONTACT RELAYS

American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Bendix Aviation, Ltd., North Hollywood, Cal.
Edison, Inc., Thomas A., Instrument Div., 51 Lakeside Ave., West Orange, N. J.
General Electric Co., Schenectady, N. Y.

Resistors

DECADE RESISTORS

Amplifier Co. of America, 17 W. 20th St. New York, N. Y.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Daven Co., 158 Summit St., Newark, N. J.
General Radio Co., 30 State St., Cambridge, Mass.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa. (See page 6.)
Supreme Instruments Corp., 414 Howard St., Greenwood, Miss.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.

DUMMY ANTENNA RESISTORS

Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill.

FIXED RESISTORS

Acme Electric Heating Co., 1217 Washington St., Boston, Mass.
Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
Atlas Resistor Co., 423 Broome St., New York, N. Y.
Centralab, 900 E. Keefe Ave., Milwaukee, Wis. (See page 8.)
Clarostat Mfg. Co., 287 N. Sixth St., Brooklyn, N. Y. (See page 136.)
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Daven Co., 158 Summit St., Newark, N. J.
Dixon Crucible Co., Joseph, Monmouth St., Jersey City, N. J.
Electric Controller & Mfg. Co., 2701 E. 79th St., Cleveland, Ohio
Electro-Motive Mfg. Co., Willimantic, Conn.
Erie Resistor Corp., 644 W. 12th St., Erie, Pa. (See page 45.)
Euclid Electric & Mfg. Co., Chardon Rd., Euclid, Ohio
General Electric Co., Schenectady, N. Y.
Globar Div. Carborundum Co., Buffalo Ave., Niagara Falls, N. Y. (See p. 33.)
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J. (See page 20.)
Instrument Resistors Co., Little Falls, N. J. (See page 14.)
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93)
Monitor Controller Co., 51 S. Gay St., Baltimore, Md.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Precision Resistor Co., 334 Badger Ave., Newark, N. J.
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, N. Y.
Schaefer Bros. Co., 1059 W. 11th St., Chicago, Ill.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Speer Resistor Corp., St. Marys, Pa. (See page 113.)
Sprague Specialties Co., North Adams, Mass. (See page 135.)
Square D Co., 6060 Rivard St., Detroit, Mich.
Stackpole Carbon Co., Tannery St., St. Marys, Pa. (See page 48.)
States Co., 3 New Park Ave., Hartford, Conn.
Tuttle & Co., H. W., 261 W. Maumee St., Adrian, Mich.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y. (See page 34.)
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
White Dental Mfg. Co., S. S. (Industrial Div.), 10 E. 40th St., New York, N. Y. (See page 170.)
Wirt Co., 5221 Greene St. (Germantown), Philadelphia, Pa.

HIGH FREQUENCY RESISTORS

Beck Bros., 421 Sedgley Ave., Philadelphia, Pa.
Daven Co., 158 Summit St., Newark, N. J.
Eastern Specialty Co., 3619 N. Eighth St., Philadelphia, Pa.
General Radio Co., 30 State St., Cambridge, Mass.
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J. (See page 20)
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J. (See page 14.)
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Precision Resistor Co., 334 Badger Ave., Newark, N. J.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa. (See page 6.)
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y. (See page 34.)

HIGH VOLTAGE RESISTORS

Beck Bros., 421 Sedgley Ave., Philadelphia, Pa.
Clarostat Mfg. Co., 285 N. Sixth St., Brooklyn, N. Y.
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J. (See page 20.)
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93.)
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa. (See page 6.)
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y. (See page 34.)

PRECISION RESISTORS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Gray Instrument Co., 64 W. Johnson St., (Germantown) Philadelphia, Pa.
Instrument Resistors Co., Little Falls, N. J.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Meter Devices Co., 1001 Prospect Ave., S. W., Canton, Ohio
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa. (See page 6.)
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

WIRE WOUND RESISTORS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Beck Bros., 421 Sedgley Ave., Philadelphia, Pa.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Clarostat Mfg. Co., 285 N. Sixth St., Brooklyn, N. Y. (See page 136.)
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Daven Co., 158 Summit St., Newark, N. J.
General Radio Co., 30 State St., Cambridge, Mass.
Gray Instrument Co., 64 W. Johnson St., (Germantown) Philadelphia, Pa.
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J. (See page 20.)
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J. (See page 14.)
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93.)
Lectrohm, Inc., 5133 W. 25th Pl., (Cicero) Chicago, Ill. (See page 181.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Micamold Radio Corp., 1087 Flushing Ave., Brooklyn, N. Y.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
National Electric Controller Co., 5307 Ravenswood Ave., Chicago, Ill.
Ohio Carbon Co., 12508 Berea Rd., Cleveland, Ohio
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y. (See page 34.)
White Dental Mfg. Co., S. S., 10 E. 40th St., New York, N. Y. (See page 170.)
Wirt Co., 5221 Greene St., Philadelphia, Pa.

Rheostats

SLIDE WIRE RHEOSTATS

Beck Bros., 421 Sedgley Ave., Philadelphia, Pa.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa. (See page 165.)
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Chicago Apparatus Co., 1735 N. Ashland Ave., Chicago, Ill.
General Radio Co., 30 State St., Cambridge, Mass.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
National Electric Controller Co., 5307 Ravenswood Ave., Chicago, Ill.
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y. (See page 34.)

VARIABLE RESISTORS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Atlas Resistor Co., 423 Broome St., New York, N. Y.
Beck Bros., 421 Sedgley Ave., Philadelphia, Pa.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Centralab, 900 E. Keefe Ave., Milwaukee, Wis.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Chicago Apparatus Co., 1735 N. Ashland Ave., Chicago, Ill.
Chicago Telephone Supply Co., 1142 W. Beardsley Ave., Elkhart, Ind.
Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Clarostat Mfg. Co., 285 N. 6th St., Brooklyn, N. Y.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland, Ohio
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
DeJur Amsco Corp., 6 Bridge St., Shelton, Conn. (See page 128)
Eastern Specialty Co., 3619 N. Eighth St., Philadelphia, Pa.
Electro Motive Mfg. Co., Willimantic, Conn.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Gray Instrument Co., 64½ W. Johnson St., Philadelphia, Pa.
Hardwick, Hindle, Inc., 40 Hermon St., Newark, N. J.
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa. (See page 93.)
Le Carbone, Inc., Myrtle Ave., Boonton, N. J.
Lectrohm, Inc., 5133 W. 25th Pl. (Cicero) Chicago, Ill.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
National Carbon Co., 30 E. 42 St., New York, N. Y.
National Electric Controller Co., 5305 Ravenswood Ave., Chicago, Ill.
National Technical Laboratories, 820 Mission St., South Pasadena, Cal.
Ohio Carbon Co., 12508 Berea Rd., Cleveland, Ohio
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Precision Resistor Co., 334 Badger Ave., Newark, N. J.
Rex Rheostat Co., 3 Foxhurst Rd., Baldwin, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Speer Carbon Co., St. Marys, Pa.
Stackpole Carbon Co., Tannery St., St. Marys, Pa.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wirt Co., 5221 Greene St., Philadelphia, Pa.

Rivets

American Brass Co., Waterbury, Conn.
Atlas Tack Corp., Pleasant St., Fairhaven, Mass.
Blake & Johnson Co., 1495 Thomaston Ave., Waterville, Conn.
Chicago Rivet & Machine Co., 1830 S. 54th Ave., (Cicero), Chicago, Ill.
Clark Bros. Bolt Co., Milldale, Conn.
Clendenin Bros., 108 South St., Baltimore, Md.
Cobb & Drew, Kingston St., Plymouth, Mass.
Harper Co., H. M., 2630 Fletcher St., Chicago, Ill.
Hassall, Inc., John, 402 Oakland St., Brooklyn, N. Y.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Lamson & Sessions Co., 1971 W. 85th St., Cleveland, Ohio
Manufacturer's Belt Hook Co., 1321 W. Congress St., Chicago, Ill.
Manufacturers Screw Products, 216 W. Hubbard St., Chicago, Ill.
Milton Mfg. Co., Milton, Pa.
New England Screw Co., 109 Emerald St., Keene, N. H.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Pittsburgh Screw & Bolt Corp., 2719 Preble Ave., N. S., Pittsburgh, Pa.
Plume & Atwood Mfg. Co., 470 Bank St., Waterbury, Conn.
Progressive Mfg. Co., 52 Norwood St., Torrington, Conn.
Reed & Prince Mfg. Co., Duncan Ave., Worcester, Mass.
Rockford Bolt & Steel Co., 126 Mill St., Rockford, Ill.
Scovill Mfg. Co., 99 Mill St., Waterbury, Conn.
Sterling Bolt Co., 707 W. Van Buren St., Chicago, Ill.
Stimpson Co., Edwin B., 74 Franklin Ave., Brooklyn, N. Y.
Tubular Rivet & Stud Co., Wollaston, Mass.

Scales

DIAL SCALES

see also Dials
also Escutcheons

American Emblem Co., Utica, N. Y.
Austin Co., O., 42 Greene St., New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Crowe Name Plate & Mfg. Co., 3701 Ravenswood Ave., Chicago, Ill.
The Emeloid Co., Inc., 287 Laurel Ave., Arlington, N. J.
Gemloid Corp., 79-10 Albion Ave., Elmhurst, N. Y.
Grammes & Sons, Inc., L. F., 366 Union St., Allentown, Pa.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Mallory & Co., P. R. 3029 E. Washington St., Indianapolis, Ind.
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
Parisian Novelty Co., Western Ave. at 35th St., Chicago, Ill.

Screws

MACHINE SCREWS

American Screw Co., 21 Stevens St., Providence, R. I.
Atlas Bolt & Screw Co., 1144 Ivanhoe Rd., Cleveland, Ohio
Blake & Johnson Co., 1495 Thomaston Ave., Waterville, Conn.
Central Screw Co., 3511 Shields Ave., Chicago, Ill.
Chandler Products Corp., 1475 Chardon Rd., Cleveland, Ohio
Clark Bros. Bolt Co., Milldale, Conn.
Continental Screw Co., New Bedford, Mass.
Corbin Screw Corp., High, Myrtle & Grove Sts., New Britain, Conn.
Eagle Lock Co., Terryville, Conn.
Economy Screw Corp., 2717 Greenview Ave., Chicago, Ill.
Elco Tool & Screw Corp., 1800 Broadway, Rockford, Ill.
Ferry Screw Products, Inc., E. W., 8219 Almira Ave., Cleveland, Ohio
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.

General Mfg. Co., Waterbury, Conn.
Hassall, Inc., John, 402 Oakland St., Brooklyn, N. Y.
Hubbell, Inc., Harvey, State St. & Bostwick Ave., Bridgeport, Conn.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
International Screw Co., 9444 Roselawn Ave., Detroit, Mich.
Keystone Bolt & Nut Co., 9507 Meech Ave., Cleveland, Ohio
Lamson & Sessions Co., 1971 W. 85th St., Cleveland, Ohio
Manufacturers Screw Products, 216 W. Hubbard St., Chicago, Ill.
National Lock Co., Rockford, Ill.
National Screw & Mfg. Co., 2440 E. 75th St., Cleveland, Ohio
New England Screw Co., 109 Emerald St., Keene, N. H.
Parker-Kalon Corp., 200 Varick St., New York, N. Y.
Pawtucket Screw Co., 141 Hughes Ave., Pawtucket, R. I.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Progressive Mfg. Co., 52 Norwood St., Torrington, Conn.
Reading Screw Co., Norristown, Pa.
Reed & Prince Mfg. Co., Duncan Ave., Worcester, Mass.
Remington Screw & Bolt Mfg. Co., Cold Spring-on-Hudson, N. Y.
Rockford Screw Products Co., 2541 Ninth St., Rockford, Ill.
Russell, Burdsall & Ward Bolt & Nut Co., Midland Ave., Port Chester, N. Y.
St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis, Mo.
Scovill Mfg. Co., 99 Mill St., Waterbury, Conn.
Sterling Bolt Co., 707 W. Van Buren St., Chicago, Ill.
United Screw & Bolt Corp., 2513 W. Culerton St., Chicago, Ill.
Wasmer Bolt & Screw Corp., 13000 Athens Ave., Cleveland, Ohio
Western Automatic Machine Screw Co., 922 Foster Ave., Elyria, Ohio

RECESSED HEAD SCREWS

American Screw Co., 21 Stevens St., Providence, R. I. (See page 16.)
The Bristol Co., Waterbury, Conn. (See page 16.)
Central Screw Co., Chicago, Ill. (See page 16.)
Chandler Products Co., Cleveland, Ohio
Continental Screw Co., New Bedford, Mass. (See page 16.)
Corbin Screw Corp., High, Myrtle & Grove Sts., New Britain, Conn. (See page 16.)
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
International Screw Co., 9444 Roselawn Ave., Detroit, Mich. (See page 16.)
Lamson & Sessions Co., Cleveland, Ohio. (See page 16.)
National Screw & Mfg. Co., 2440 E. 75th St., Cleveland, Ohio. (See page 16.)
New England Screw Co., 109 Emerald St., Keene, N. H. (See page 16.)
Parker Co., Chas., Meriden, Conn. (See 16.)
Parker-Kalon Corp., 200 Varick St., New York, N. Y. (See page 16.)
Pawtucket Screw Co., Pawtucket, R. I. See page 16.)
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill. (See page 16.)
Russell, Burdsall & Ward Bolt & Nut Co., Midland Ave., Port Chester, N. Y. See page 16.)
Scovill Mfg. Co., Waterbury, Conn. (See page 16.)
Shakeproof, Inc., 2565 N. Keeler Ave., Chicago, Ill. (See page 16.)
The Southington Hdwe. Mfg. Co., Southington, Conn. (See page 16.)
Whitney Screw Co., Nashua, N. H. (See page 16.)

SELF TAPPING SCREWS

American Screw Co., 21 Stevens St., Providence, R. I.
Central Screw Co., 3511 Shields Ave., Chicago, Ill.
Continental Screw Co., New Bedford, Mass.
Corbin Screw Corp., High, Myrtle & Grove Sts., New Britain, Conn.
Elco Tool & Screw Corp., 1800 Broadway, Rockford, Ill.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Lamson & Sessions Co., 1971 W. 85th St., Cleveland, Ohio
Manufacturers Screw Products, 216 W. Hubbard St., Chicago, Ill.
National Screw & Mfg. Co., 2440 E. 75th St., Cleveland, Ohio
Parker-Kalon Corp., 200 Varick St., New York, N. Y.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Rhode Island Tool Co., 148 W. River St., Providence, R. I.
Russell, Burdsall & Ward Bolt & Nut Co., Midland Ave., Port Chester, N. Y.

SET and CAP SCREWS

Acme Machine Products Co., Muncie, Ind.
Allen Mfg. Co., 129 Sheldon St., Hartford, Conn.
Allied Products Corp., 4646 Lawton Ave., Detroit, Mich.
Atlas Bolt & Screw Co., 1144 Ivanhoe Rd., Cleveland, Ohio
Bristol Co., Waterbury, Conn.
Chandler Products Corp., 1475 Chardon Rd., Cleveland, Ohio
Chicago Screw Co., 1026 S. Homan Ave., Chicago, Ill.
Clark Bros. Bolt Co., Milldale, Conn.
Cleveland Cap Screw Co., 2917 E. 79th St., Cleveland, Ohio
Continental Screw Co., New Bedford, Mass.
Corbin Screw Corp., High, Myrtle & Grove Sts., New Britain, Conn.
Elco Tool & Screw Corp., 1800 Broadway, Rockford, Ill.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Federal Screw Works, 3401 Martin St., Detroit, Mich.
Ferry Cap & Set Screw Co., Scranton & North Rds., Cleveland, Ohio
Ferry Screw Products, Inc., E. W., 8219 Almira Ave., Cleveland, Ohio
Harper Co., H. M., 2630 Fletcher St., Chicago, Ill.
Hartford Machine Screw Co., 476 Capitol Ave., Hartford, Conn.
Haskell Mfg. Co., William H., 22 Commerce St., Pawtucket, R. I.
Holo-Krome Screw Corp., 11 Brooks St., Hartford, Conn.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Keystone Bolt & Nut Co., 9507 Meech Ave., Cleveland, Ohio
Lamson & Sessions Co., 1971 W. 85th St., Cleveland, Ohio
Lewis Bolt & Nut Co., 504 Malcolm Ave., S. E., Minneapolis, Minn.
Mac-It Parts Co., Lancaster, Pa.
Manufacturers Screw Products, 216 W. Hubbard St., Chicago, Ill.
Mid-West Screw Products Co., Main & St. George Sts., St. Louis, Mo.
Monarch Cap Screw & Mfg. Co., 5906 Park Ave., Cleveland, Ohio
Moore, George W., 44 Farnsworth St., Boston, Mass.
National Acme Co., 170 E. 131st St., Cleveland, Ohio
National Lock Co., Rockford, Ill.
National Screw & Mfg. Co., 2440 E. 75th St., Cleveland, Ohio
Ottemiller Co., Wm. H., York, Pa.
Parker-Kalon Corp., 200 Varick St., New York, N. Y.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Reed & Prince Mfg. Co., Duncan Ave., Worcester, Mass.
Remington Screw & Bolt Mfg. Co., Cold Spring-on-Hudson, N. Y.
Republic Steel Corp., Upson Nut Div., Cleveland, Ohio
Rhode Island Tool Co., 148 W. River St., Providence, R. I.
Rockford Bolt & Steel Co., 126 Mill St., Rockford, Ill.
Rockford Screw Products Co., 2541 Ninth St., Rockford, Ill.
Russell, Burdsall & Ward Bolt & Nut Co., Midland Ave., Port Chester, N. Y.
St. Louis Screw & Bolt Co., 6900 N. Broadway, St. Louis, Mo.
Sandusky Nut Co., Sandusky, Ohio
Scovill Mfg. Co., 99 Mill St., Waterbury, Conn.
Shimer & Sons, Samuel J., Milton, Pa.
Standard Pressed Steel Co., Jenkintown, Pa. (See page 178.)
Sterling Bolt Co., 707 W. Van Buren St., Chicago, Ill.
Triplex Screw Co., 5317 Grant Ave., Cleveland, Ohio
Union Screw & Mfg. Co., 207 S. Main St., Pittsburgh, Pa.
United Screw & Bolt Corp., 2513 W. Culerton St., Chicago, Ill.
Wasmer Bolt & Screw Corp., 13000 Athens Ave., Cleveland, Ohio
Western Automatic Machine Screw Co., 922 Foster Ave., Elyria, Ohio
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

WOOD SCREWS

American Screw Co., 21 Stevens St., Providence, R. I.
Atlantic Screw Works, Inc., Hartford, Conn.
Continental Screw Co., New Bedford, Mass.
Corbin Screw Corp., High, Myrtle & Grove Sts., New Britain, Conn.
Eagle Lock Co., Terryville, Conn.
Elco Tool & Screw Corp., 1800 Broadway, Rockford, Ill.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Ferry Screw Products, Inc., E. W., 8219 Almira Ave., Cleveland, Ohio.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Keeler Brass Co., Webb & Bek Sts., Grand Rapids, Mich.
Keystone Bolt & Nut Co., 9507 Meech Ave., Cleveland, Ohio
Manufacturers Screw Products, 216 W. Hubbard St., Chicago, Ill.
National Lock Co., Rockford, Ill.
National Screw & Mfg. Co., 2440 E. 75th St., Cleveland, Ohio
Parker Co., Charles, 48 Elm St., Meriden, Conn.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Reading Screw Co., Norristown, Pa.
Reed & Prince Mfg. Co., Duncan Ave., Worcester, Mass.
Remington Screw & Bolt Mfg. Co., Cold Spring-on-Hudson, N. Y.
Rockford Screw Products Co., 2541 Ninth St., Rockford, Ill.
Southington Hardware Co., Southington, Conn.
Sterling Bolt Co., 707 W. Van Buren St., Chicago, Ill.
Weber-Knapp Co., 1939 Chadakoin St., Jamestown, N. Y.
Whitney Screw Corp., Nashua, N. H.

Shafts

FLEXIBLE SHAFTS

Albertson & Co., 3100 Floyd Ave., Sioux City, Iowa
Breeze Corps., 24 S. Sixth St., Newark, N. J.
Chicago Flexible Shaft Co., 5600 Roosevelt Rd., Chicago, Ill.
Coates Clipper & Mfg. Co., 237 Chandler St., Worcester, Mass.
Fischer Spring Co., Chas., 248 Kent Ave., Brooklyn, N. Y.
Haskins Co., R. G., 615 S. California St., Chicago, Ill.
Jarvis Co., Charles L., Middletown, Conn.
Linick, Green & Reed, 55 E. Washington St., Chicago, Ill.
Mall Tool Co., 7740 S. Chicago Ave., Chicago, Ill.
Martindale Electric Co., 1371 Hird Ave., Cleveland, Ohio
Pratt & Whitney Div., Niles-Bement-Pond Co., Charter Oak Blvd., Hartford, Conn.
Stewart Mfg. Corp., F. W., 4311 Ravenswood Ave., Chicago, Ill.
Stow Mfg. Co., 445 State St., Binghamton, N. Y.
Strand & Co., N. A., 5001 N. Wolcott Ave., Chicago, Ill.
Swartz & White Mfg. Co., 215 Washington St., Binghamton, N. Y.
United States Electrical Tool Co., 2490 Riverside Drive, Cincinnati, Ohio
Walker-Turner Co., Plainfield, N. J.
White Dental Mfg. Co., S. S. (Industrial Div.), 10 E. 40th St., New York, N. Y. (See page 170.)
Wyzenbeck & Staff, 838 W. Hubbard St., Chicago, Ill.

Shields

TUBE SHIELDS

American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bond Products Co., 13139 Hamilton Ave., Detroit, Mich.
Bud Radio, Inc., 5205 Cedar Ave., Cleveland, Ohio
Ellis & Sons, Inc., George D., 309 N. Third St., Philadelphia, Pa.
Erie Can Co., 816 W. Erie St., Chicago, Ill.

Goat Metal Stampings, Inc., 314 Dean St., Brooklyn, N. Y.
Guthman & Co., Edwin I., 400 S. Peoria St., Chicago, Ill.
Hegeler Zinc Co., Danville, Ill.
J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Miller Co., J. W., 5917 N. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass.
Paul & Beekman, 4250 Wissahickon Ave., Philadelphia, Pa.

Sockets

DIAL LIGHT SOCKETS

Lenz Electric Co., 1751 No. Western Ave., Chicago, Ill.

TUBE SOCKETS

Aladdin Radio Industries, Inc., 501 W. 35th St., Chicago, Ill.
Alden Products Co., 715 Center St., Brockton, Mass.
American Phenolic Corp., 1830 S. 54th Ave., Chicago, Ill.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Cinch Mfg. Co., 2335 W. Van Buren St., Chicago, Ill.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Eagle Electric Mfg. Co., 59 Hall St., Brooklyn, N. Y.
Eby, Inc., H. H., 4700 Stenton Ave., Philadelphia, Pa.
Federal Screw Products Co., 26 S. Jefferson St., Chicago, Ill.
Franklin Mfg. Corp., A. W., 175 Varick St., New York, N. Y. (See page 98.)
General Electric Co., Plastics Dept., 1 Plastics Ave., Pittsfield, Mass.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Johnson Co., E. F., Waseca, Minn.
Jones, Howard B., 2300 Wabansia Ave., Chicago, Ill. (See page 151.)
Micarta Fabricators, Inc., 4619 Ravenswood Ave., Chicago, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Remler Co., 2101 Bryant St., San Francisco, Cal.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.

Solder

Allen Co., L. B., 6730 Bryn Mawr Ave., Chicago, Ill.
Alpha Metal & Rolling Mills, Inc., 363 Hudson Ave., Brooklyn, N. Y.
Belmont Smelting & Refining Works, Inc., 330 Belmont Ave., Brooklyn, N. Y.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Division Lead Co., 836 W. Kinzie St., Chicago, Ill.
Dunton Co., M. W., 670 Eddy St., Providence, R. I.
Gardiner Metal Co., 4820 S. Campbell Ave., Chicago, Ill.
Glaser Lead Co., 31 Wycoff Ave., Brooklyn, N. Y.
Heck Metal Co., 318 N. Holliday St., Baltimore, Md.
Kester Solder Co., 4212 Wrightwood Ave., Chicago, Ill.
Lenk Mfg. Co., Newton Lower Falls, Mass.
National Lead Co., 111 Broadway, New York, N. Y.
New York Solder Co., 15 Crosby St., New York, N. Y.
Ruby Chemical Co., 68 McDowell St., Columbus, Ohio

Soundproofing

Celotex Corp., 919 N. Michigan Ave., Chicago, Ill.
Insulite Co., Builders Exchange Bldg., Minneapolis, Minn.
Johns-Manville, 22 E. 40th St., New York, N. Y.
Masonite Corp., Cellufoam Products Div. 6565 S. Lavergne Ave., Chicago, Ill.
United States Gypsum Co., 300 W. Adams St., Chicago, Ill.

Speakers

see Loudspeakers

Springs

Accurate Spring Mfg. Co., 3817 W. Lake St., Chicago, Ill.
American Coil Spring Co., 2034 Keating Ave., Muskegon, Mich.
American Spiral Spring & Mfg. Co., 5528 Harrison St., Pittsburgh, Pa.
American Spring & Wire Specialty Co., 816 N. Spaulding St., Chicago, Ill.
American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio
Barnes Co., Wallace, Div. of Associated Spring Corp., Bristol, Conn.
Barnes-Gibson-Raymond Div. of Associated Spring Corp., 6400 Miller Ave., Detroit, Mich.
Cary Spring Works, Inc., 240 W. 29th St., New York, N. Y.
Cleveland Wire Spring Co., Cuyahoga Heights, Cleveland, Ohio
Cuyahoga Spring Co., 10272 Berea Rd., Cleveland, Ohio
Dunbar Bros. Co., Div. of Associated Spring Corp., 76 South St., Bristol, Conn.
Fischer Spring Co., Chas., 260 Kent Ave., Brooklyn, N. Y.
Gardner Wire Co., 5045 W. Lake St., Chicago, Ill.
Gibson Co., Wm. D., Div. of Associated Spring Corp., 1800 Clybourn Ave., Chicago, Ill.
Hubbard Spring Co., M. D., 672 Central Ave., Pontiac, Mich.
Hunter Pressed Steel Co., Lansdale, Pa. (See page 43.)
Instrument Specialties Co., 246 Bergen Blvd., Little Falls, N. J. (See page 152.)
Jones Spring Co., W. B., 124 E. Seventh St., Cincinnati, Ohio
Lee Spring Co., 30 Main St., Brooklyn, N. Y.
Manross & Sons, F. N., Div. of Associated Spring Corp., Forestville, Conn.
Mid-West Spring Mfg. Co., 4634 S. Western Ave., Chicago, Ill.
New Britain Spring Co., New Britain, Conn.
Muehlhausen Spring Corp., E. Ottowa Ave., Logansport, Ind.
Peck Spring Co., Plainville, Conn.
Phoenix Hardware Mfg. Co., 49 Illinois St., Buffalo, N. Y.
Precision Products Co., Waltham, Mass.
Raymond Mfg. Co., Div. of Associated Spring Corp., 226 S. Center St., Corry, Pa.
Reliance Spring & Mfg. Co., 238 40th St., Brooklyn, N. Y.
Reynolds Spring Co., 955 Water St., Jackson, Mich.
Steel Co., Herman D., Lafayette Bldg., Philadelphia, Pa.
Tuck Mfg. Co., Brockton, Mass.
Union Spring & Mfg. Co., New Kensington, Pa.
Wickwire Spencer Steel Co., 500 Fifth Ave., New York, N. Y.
Yost Superior Co., Springfield, Ohio

Stabilizers

VOLTAGE STABILIZERS—see Regulators

Stampings

METAL STAMPINGS and LAMINATIONS

Accurate Spring Mfg. Co., 3817 W. Lake St., Chicago, Ill.
Acklin Stamping Co., 1925 Nebraska Ave., Toledo, Ohio
Acme Stamping & Mfg. Co., 200 Corliss St., Pittsburgh, Pa.
Ainsworth Mfg. Co., 2200 Franklin St., Detroit, Mich.
Akron-Selle Co., Chestnut St., Akron, Ohio
Allegheny-Ludlum Steel Corp., Oliver Bldg., Pittsburgh, Pa.
Aluminum Goods Mfg. Co., 15th & Franklin Sts., Manitowoc, Wis.
American Brass Co., Waterbury, Conn.
American Emblem Co., Utica, N. Y.
American Pulley Co., 4260 Wissahickon Ave., Philadelphia, Pa.
American Stamping Co., 1000 E. 64th St., Cleveland, Ohio
Ansonia Mfg. Co., Ansonia, Conn.
Auburn Mfg. Co., 5 Stack St., Middletown, Conn.
Barnes Co., Div. of Associated Spring Corp., Wallace, Bristol, Conn.
Barnes-Gibson-Raymond Div. of Associated Spring Corp., 6400 Miller Ave., Detroit, Mich.
Bay State Stamping Co., 380 Chandler St., Worcester, Mass.
Berger Mfg. Co., Canton, Ohio
Bettcher Mfg. Co., 3106 W. 61st St., Cleveland, Ohio
Bond Products Co., 13139 Hamilton Ave., Detroit, Mich.
Bowen Products Corp., Auburn, N. Y.
Brewer-Tichner Corp., Cortland, N. Y.
Bridgeport Brass Co., E. Main St., Bridgeport, Conn.
Briggs Mfg. Co., 11631 Mack Ave., Detroit, Mich.
Budd Mfg. Co., Edward G., 25th & Hunting Park Ave., Philadelphia, Pa.
Chase Brass & Copper Co., 236 Grand St., Waterbury, Conn.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Continental Machines, Inc., 1308 South Washington Ave., Minneapolis, Minn.
Crosby Co., 183 Pratt St., Buffalo, N. Y.
Dahlstrom Metallic Door Co., Buffalo St., Jamestown, N. Y.
Defiance Pressed Steel Co., Defiance, Ohio
Detroit Stamping Co., 3461 W. Fort St., Detroit, Mich.
Dickey-Grabler Co., 10302 Madison Ave., Cleveland, Ohio
Dunbar Bros. Co., 76 South St., Bristol, Conn.
Edwards Mfg. Co., 529 Eggleston Ave., Cincinnati, Ohio
Erie Art Metal Co., 1602 E. 18th St., Erie, Pa.
Erie Can Co., 816 W. Erie St., Chicago, Ill.
Faries Mfg. Co., 1036 E. Grand Ave., Decatur, Ill.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Forsyth Metal Goods Co., Aurora, Ill.
Fostoria Pressed Steel Co., Fostoria, Ohio
Franklin Fibre-Lamitex Corp., Wilmington, Del.
Franklin Mfg. Corp., A. W., 175 Varick St., New York, N. Y. (See page 98.)
Fulton Sylphon Co., 2300 Cumberland Ave., Knoxville, Tenn.
General Industries Co., Cleveland and Olive Sts., Elyria, Ohio
General Metal Products Co., 3879 Delor St., St. Louis, Mo.
Geometric Stamping Co., 1111 E. 200th St., Cleveland, Ohio
Gibson Co., Div. of Associated Spring Corp., Wm. D., 1800 Clybourn Ave., Chicago, Ill.
Glenvale Products Corp., 9316 French Rd., Detroit, Mich.
Goat Metal Stampings, Inc., 314 Dean St., Brooklyn, N. Y.
Goetze Gasket & Packing Co., New Brunswick, N. J.
Grabler Mfg. Co., 6565 Broadway, S.E., Cleveland, Ohio
Grammes & Sons, L. F., 344 Union St., Allentown, Pa.
Gregory Mfg. Co., (Mt. Carmel) New Haven, Conn.
Greist Mfg. Co., 501 Blake St., New Haven, Conn.
Hoosier Lamp & Stamping Corp., Evansville, Ind.
Hubbard Spring Co., M. D., 672 Central Ave., Pontiac, Mich.
Hunter Pressed Steel Co., Lansdale, Pa.
Insuline Corp. of America, 30-34 Long Island City, N. Y. (See page 163.)
International Insulating Div., General Industries Co., Cleveland and Olive Sts., Elyria, Ohio
King Laboratories, Inc., 205 Oneida St., Syracuse, N. Y.
Lansing Stamping Co., 1159 Pennsylvania Ave., Lansing, Mich.
Manganese Steel Forge Co., Allen St. and Castor Ave., Philadelphia, Pa.
Master Products Co., 6414 Park Ave., Cleveland, Ohio
McCord Radiator & Mfg. Co., 2587 E. Grand Ave., Detroit, Mich.
Melrath Supply & Gasket Co., Tioga & Memphis Sts., Philadelphia, Pa.
Mico Instrument Co., 10 Arrow St., Cambridge, Mass. (See page 162.)
Milwaukee Stamping Co., 802 S. 72d St., Milwaukee, Wis.
National Brass Co., 1599 Madison Ave., Grand Rapids, Mich.

National Stamping Co., 630 St. Jean St., Detroit, Mich.
O'Neil-Irwin Mfg. Co., 316 8th Ave., S, Minneapolis, Minn. (See page 170.)
Parish Pressed Steel Co., Robinson & Neiser Sts., Reading, Pa.
Parisian Novelty Co., Western Ave. at 35th St., Chicago, Ill.
Patton-Mac Guyer Co., Baker St. & Virginia Ave., Providence, R. I.
Peck Spring Co., Plainville, Conn.
Permoflux Corp., 4916 W. Grand Ave., Chicago, Ill.
Pheoll Mfg. Co., 5700 Roosevelt Rd., Chicago, Ill.
Plume & Atwood Mfg. Co., 470 Bank St., Waterbury, Conn.
Powell Pressed Steel Co., Hubbard, Ohio
Prentice Mfg. Co., G. E., New Britain Ave., New Britain, Conn.
Pressed Steel Co., Wilkes-Barre, Pa.
Raymond Mfg. Co., Div. of Associated Spring Corp., 226 S. Center St., Corry, Pa.
Reliable Spring Co., 3167 Fulton Rd., Cleveland, Ohio
Revere Copper & Brass, Inc., 230 Park Ave., New York, N. Y.
Rockwood Sprinkler Co., 50 Harlow St., Worcester, Mass.
Saginaw Stamping & Tool Co., Saginaw, Mich.
Scovill Mfg. Co., 99 Mill St., Waterbury, Conn.
Sessions & Sons, J. H., Bristol, Conn.
Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn, N. Y. (See page 150)
Standard Pressed Steel Co., Jenkintown, Pa.
Stanley Works, New Britain, Conn.
Steel & Tubes, Inc., 250 E. 131st St., Cleveland, Ohio
Stimpson Co., Edwin B., 74 Franklin Ave., Brooklyn, N. Y.
Swanson Machine Co., Jamestown, N. Y.
Thomas & Skinner Steel Products Co., 1120 E. 23d St., Indianapolis, Ind.
Titchener & Co., E. H., Walnut St., & Erie R. R., Binghamton, N. Y.
Transue & Williams Steel Forging Corp., 562 W. Ely St., Alliance, Ohio
Truscon Steel Co., Pressed Steel Div. 6100 Truscon Ave., Cleveland, Ohio
Union Spring & Mfg. Co., New Kensington, Pa.
United Carr Fastener Corp., Cambridge, Mass.
United Screw & Bolt Corp., 2513 W. Cullerton St., Chicago, Ill.
U. S. Indestructible Gasket Co., 829 E. 15 St., Brooklyn, N. Y.
Veeder-Root, Inc., 63 Sargeant St., Hartford, Conn.
Victor Mfg. & Gasket Co., 5750 W. Roosevelt Rd., Chicago, Ill.
Waterbury Button Co., 835 S. Main St., Waterbury, Conn.
Webster-Chicago Corp., 5622 Bloomingdale Ave., Chicago, Ill.
Western Cartridge Co., East Alton, Ill.
Whitehead Stamping Co., 1661 W. Lafayette Blvd., Detroit, Mich.
Wilcox, Crittenden & Co., Middletown, Conn.
Worcester Pressed Steel Co., 100 Barker Ave., Worcester, Mass.
Wrought Washer Mfg. Co., 2223 S. Bay St., Milwaukee, Wis.
Youngstown Pressed Steel Co., Warren Ohio

Stands

MICROPHONE STANDS

Allied Radio Corp., 833 W. Jackson Blvd., Chicago, Ill.
American Microphone Co., 1915 S. Western Ave., Los Angeles, Cal.
Amperite Co., 561 Broadway, New York, N. Y.
Art Specialty Co., 3245 Lake St., Chicago, Ill.
Astatic Corp., 830 Market St., Youngstown, Ohio
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Braun, Inc., W. C., 601 W. Randolph St., Chicago, Ill.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Eastern Mike-Stand Co., 56 Christopher Ave., Brooklyn, N. Y.
Electrical Sound Engineering Co., 5303 Kenilworth Ave., Baltimore, Md.
Electro-Voice Mfg. Co., 1239 South Bend Ave., South Bend, Ind.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
National-Dobro Corp., 400 S. Peoria St., Chicago, Ill.
Newcomb Audio Products Co., 2815 S. Hill St., Los Angeles, Cal.
Operadio Mfg. Co., 13th and Indiana Sts., St. Charles, Ill.
RCA Mfg. Co., Camden, N. J.
Simpson Mfg. Co., Mark, 188 W. Fourth St., New York, N. Y.
Turner Co., Cedar Rapids, Iowa
Universal Microphone Co., Centinela at Warren Lane, Inglewood, Cal.

SPEAKER STANDS

Art Specialty Co., 3245 Lake St., Chicago, Ill.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Erwood Sound Equipment Co., 223 W. Erie St., Chicago, Ill.
Lifetime Corp., 1101 Adams St., Toledo, Ohio
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Million Radio & Television Laboratories, 1617 N. Damen St., Chicago, Ill.

Steel

ELECTRICAL STEEL—see Metals

Strips

TERMINAL STRIPS—see Posts

Switches

LIMIT SWITCHES

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
United Cinephone Corp., Torrington, Conn.

ROTARY and BAND CHANGE SWITCHES

American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
Arrow-Hart & Hegeman Electric Co., 103 Hawthorne St., Hartford, Conn.
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Centralab, 900 E. Keefe Ave., Milwaukee, Wis.
Chicago Telephone Supply Co., 1142 W. Beardsley Ave., Elkhart, Ind.
Daven Co., 158 Summit St., Newark, N. J.
General Electric Co., Appliance and Merchindise Dept., Bridgeport, Conn.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill.
Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn.
JBL Instrument Co., Darby, Pa.
Lewis Engineering Co., 52 Rubber Ave., Naugatuck, Conn.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind. (See page 50.)
Meissner Mfg. Co, Mt. Carmel, Ill.
New England Radiocrafters, 1156 Commonwealth Ave., Brookline, Mass.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill. (See page 39.)
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Tagliabue Mfg. Co., C. J., Park & Nostrand Ave., Brooklyn, N. Y.
Triplett Electrical Instrument Co., 135 E. College Ave., Bluffton, Ohio

TOGGLE, PUSHBUTTON and MICRO SWITCHES

Acro Electric Co., 3167 Fulton Rd., Cleveland, O.
Arrow-Hart & Hegeman Electric Co., 103 Hawthorne St., Hartford, Conn.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Hart Mfg. Co., 110 Bartholomew Ave., Hartford, Conn.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind. (See page 50.)
McDonnell & Miller, Wrigley Bldg., Chicago, Ill.
Micro Switch Corp., Freeport, Ill.
Minneapolis-Honeywell Regulator Co., 2712 Fourth Ave., S., Minneapolis, Minn.
Mu-Switch Corp., 38 Pequit St., Canton, Mass.
Stackpole Carbon Co., Tannery St., St. Marys, Pa.
Tech Laboratories, 7 Lincoln St., Jersey City, N. J.
Wirt Co., 5221 Greene St., Philadelphia, Pa.

TIME SWITCHES

American Timer Corp., Geneva, Ill.
Anderson Mfg. Co., Albert & J. M., 305 A St., Boston, Mass.
Automatic Electric Mfg. Co., 729 S. Front St., Mankato, Minn.
Bacon Electric Timer Corp., 4513 Brooklyn Ave., Cleveland, Ohio
Cleveland Time Clock & Service Co., Superior Ave. at E. 27th St., Cleveland, Ohio
Cramer Co., R. W., Centerbrook, Conn. (See page 169.)
Eagle Signal Corp., Moline, Ill.
Electric Controls Corp., 68 Murray St., New York, N. Y.
Fernwall, Inc., Ashland, Mass.
Frober-Faybor Co., Chagrin Falls, Ohio
General Electric Co., Schenectady, N. Y.
Industrial Engineering Corp., Evansville, Ind.
Industrial Instrument Co., 2249 14th St., S.W., Akron, Ohio
Mercoid Corp., 4201 Belmont Ave., Chicago, Ill.
Minneapolis-Honeywell Regulator Co., 2712 Fourth Ave., S., Minneapolis, Minn.
Northwestern Clock Co., Brown Bldg., Omaha, Neb.
Paragon Electric Co., 37 W. Van Buren St., Chicago, Ill.
Penn Electric Switch Co., Goshen, Ind.
Reliance Automatic Lighting Co., 1931 Mead St., Racine, Wis.
Rhodes, Inc., M. H., 30 Bartholomew Ave., Hartford, Conn.
Sangamo Electric Co., Springfield, Ill.
South Bend Current Controller Co., 2038 River Pk., South Bend, Ind.
States Co., 19 New Park Ave., Hartford, Conn. (See page 165.)
Swartzbaugh Mfg. Co., 1336 W. Bancroft St., Toledo, Ohio
Thomas Clock Co., Seth, Main & Trott Sts., Thomaston, Conn.
Thompson Clock Co., H. C., 38 Federal St., Bristol, Conn.
Tork Clock Co., 31 South St., Mount Vernon, N. Y.
Wadsworth Electric Mfg. Co., 20 W. 11th St., Covington, Ky.
Walser Automatic Timer Co., 420 Lexington Ave., New York, N. Y.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Zenith Electric Co., 845 S. Wabash St., Chicago, Ill.

Tape

CELLULOSE TAPE

Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Minnesota Mining & Mfg. Co., 900 Fauquier Ave., St. Paul, Minn.

COTTON or SILK TAPE

Anchor Webbing Co., 1005 Main St., Pawtucket, R. I.
Carolina Narrow Fabric Co., 1036 N. Chestnut St., Winston-Salem, N. C.
Elizabeth Webbing Mills, Pawtucket, R. I.
General Electric Co., Schenectady, N. Y.
Hope Webbing Co., Providence, R. I.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Krout & Fite Mfg. Co., Allegheny Ave. & Emerald St., Philadelphia, Pa.
Lambeth Pope Corp., New Bedford, Mass.
Linton & Bro., Horace, 3081 Ruth St., Philadelphia, Pa.
Mica Insulator Co., 200 Varick St., New York, N. Y. (See page 100.)
Priscilla Braid Co., 1309 Broad St., Central Falls, R. I.
Sidebotham, Inc., John, 4317 Griscom St., (Frankford) Philadelphia, Pa.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

VARNISHED TAPE

Acme Wire Co., 1255 Dixwell Ave., New Haven, Conn.

B & C Insulation Products, Inc., 22 W. 21st St., New York, N. Y.
Brand & Co., William, 276 Fourth Ave., New York, N. Y.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Mica Insulator Co., 200 Varick St., New York, N. Y.
New Jersey Wood Finishing Co., Electrical Insulation Dept., Woodbridge, N. J.
Owens-Corning Fiberglas Corp., Nicholas, Bldg., Toledo, Ohio
Pearce Co., R. T., 235 Scott Blvd., Covington, Ky.
Respro, Inc., Wellington Ave., Cranston, R. I.
Standard Insulation Co., 74 Paterson Ave., East Rutherford, N. J.
Sullivan & Sons Mfg. Co., J., 2224 N. Ninth St., Philadelphia, Pa.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Terminals

see Posts

Transformers

CURRENT TRANSFORMERS

Acme Electric & Mfg. Co., 31 Water St., Cuba, N. Y.
American Transformer Co., 178 Emmet St., Newark, N. J. (See page 36.)
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Arlavox Mfg. Co., 430 S. Green St., Chicago, Ill.
Chicago Transformer Corp., 3501 W. Addison St., Chicago, Ill. (See page 139.)
Davis & Co., Dean W., 549 W. Fulton St., Chicago, Ill.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Dinion Coil Co., North St., Caledonia, N. Y.
Dongan Electric Mfg. Co., 2987 Franklin St., Detroit, Mich.
Doyle, Inc., James W., 311 N. Desplaines St., Chicago, Ill.
Eastern Specialty Co., 3619 N. Eighth St., Philadelphia, Pa.
Electrical Facilities, Inc., 4224 Holden St., Oakland, Cal.
Ferranti Electric, Inc., RCA Building, New York, N. Y
Freed Transformer Co., 72 Spring St., New York, N. Y.
General Controls Co., 801 Allen Ave., Glendale, Cal.
General Transformer Corp., 1250 W. Van Buren St., Chicago, Ill. (See p. 23.)
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Jefferson Electric Co., Bellwood, Ill.
Kenyon Transformer Co., 840 Barry St., New York, N. Y. (See page 164.)
Magnetic Windings Co., 16th & Butler Sts., Easton, Pa.
New York Transformer Co., 51 W. 3rd St., New York, N. Y.
Norwalk Transformer Corp., South Norwalk, Conn.
Oxford Tartak Radio Corp., 915 W. Van Buren St., Chicago, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Sola Electric Co., 2525 Clybourn Ave., Chicago, Ill. (See page 7.)
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill. (See page 145.)
Superior Electric Co., 32 Harrison St., Bristol, Conn.
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill. (See p. 130.)
United Transformer Co., 150 Varick St., New York, N. Y. (See page 2.)
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Western Electro-Mechanical Co., 300 Broadway, Oakland, Cal.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

INSTRUMENT TRANSFORMERS

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
American Transformer Co., 178 Emmet St., Newark, N. J. (See page 36.)
Condit Works, Allis-Chalmers Mfg. Co., Hyde Park Station, Boston, Mass.
Duncan Electric Co., 244 S. Third St., Lafayette, Ind.
Electrical Facilities, Inc., 4224 Holden St., Oakland, Cal.
Erie Electric Co., 124 Church St., Buffalo, N. Y.
Esterline-Angus Co., (Speedway City) Indianapolis, Ind.
General Electric Co., Schenectady, N. Y.
Hollywood Transformer Co., 645 N. Martel Ave., Los Angeles, Cal.
Newark Transformer Co., 17 Frelinghuysen Ave., Newark, N. J.
New York Transformer Co., 51 W. 3rd St., New York, N. Y. (See page 123.)
Niagara Electric Improvement Corp., 122 E. 42d St., New York, N. Y.
Roller-Smith Co., Bethlehem, Pa.
Sangamo Electric Co., Springfield, Ill.
Sparkes Mfg. Co., 318 Jefferson St., Newark, N. J.
Standard Transformer Co., 140 Dana St., N.E., Warren, Ohio. (See page 145.)
States Co., 3 New Park Ave., Hartford, Conn.
Surges Electric Co., 101 E. Seeboth St., Milwaukee, Wis.
Uptegraff Mfg. Co., R. E., Scottdale, Pa.
Wagner Electric Corp., 6400 Plymouth Ave., St. Louis, Mo.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

I. F. TRANSFORMERS

Aladdin Radio Industries, Inc., 501 W. 35th St., Chicago, Ill.
American Transformer Co., 178 Emmet St., Newark, N. J. (See page 36.)
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Automatic Windings Co., 900 Passaic Ave., East Passaic, N. J. (See p. 9.)
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
General Winding Co., 254 W. 31st St., New York, N. Y.
Guthman & Co., E. I., 400 S. Peoria St., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Meissner Mfg. Co., Mount Carmel, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
National Co., 61 Sherman St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Sickles Co., F. W., Springfield, Mass.
Teleradio Engineering Corp., 484 Broome St., New York, N. Y.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.

RECEIVER AUDIO & POWER TRANSFORMERS

Acme Electric & Mfg. Co., 31 Water St., Cuba, N. Y.
American Transformer Co., 178 Emmet St., Newark, N. J. (See page 36.)
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Arlavox Mfg. Co., 430 S. Green St., Chicago, Ill.
Audio Development Co., 123 Bryant Ave., N., Minneapolis, Minn.
Cinaudagraph Speakers, Inc., 3929 S. Michigan Ave., Chicago, Ill.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa.
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Dinion Coil Co., 1 North St., Caledonia, N. Y.
Doyle, Inc., James W., 311 N. Desplaines St., Chicago, Ill.
Electronic Transformer Co., 515 W. 29th St., New York, N. Y.
Ferranti Electric, Inc., 30 Rockefeller Plaza, New York, N. Y. (See p. 173.)
Freed Transformer Co., 72 Spring St., New York, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
General Transformer Corp., 1250 W. Van Buren St., Chicago, Ill. (See page 23.)
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Hollywood Transformer Co., 645 N. Martel Ave., Los Angeles, Cal.
Jefferson Electric Co., Bellwood, Ill.
Kenyon Transformer Co., 840 Barry St., New York, N. Y. (See page 164.)
Magnetic Windings Co., 16th & Butler Sts., Easton, Pa.
New York Transformer Co., 51 W. Third St., New York, N. Y. (See page 123.)
Norwalk Transformer Corp., South Norwalk, Conn.
Phelps Dodge Copper Products Corp., 40 Wall St., New York, N. Y.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Raytheon Mfg. Co., 190 Willow St., Waltham, Mass. (See page 150.)
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Standard Transformer Corp., 1500 N Halsted St., Chicago, Ill. (See page 145.)
Superior Electric Co., 32 Harrison St., Bristol, Conn.
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill. (See p. 130.)
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.

TRANSMITTER TRANSFORMERS

American Transformer Co., 178 Emmet St., Newark, N. J. (See page 36.)
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa.
Doyle, Inc., James W., 311 N. Desplaines St., Chicago, Ill.
Ferranti Electric, Inc., RCA Building, New York, N. Y.
Freed Transformer Co., 72 Spring St., New York, N. Y.
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
Jefferson Electric Co., Bellwood, Ill.
Kenyon Transformer Co., 840 Barry St., New York, N. Y. (See page 164.)
New York Transformer Co., 51 W. 3rd St., St., New York, N. Y. (See page 123.)
Norwalk Transformer Corp., South Norwalk, Conn.
Raytheon Mfg. Co., 190 Willow St., Waltham, Mass.
RCA Mfg. Co., Camden, N. J.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill. (See p. 145.)
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill. (See p. 130.)
United Transformer Co., 150 Varick St., New York, N. Y. (See page 2.)
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.

VOLTAGE REGULATING TRANSFORMERS

Acme Electric & Mfg. Co., 31 Water St., Cuba, N. Y.
American Transformer Co., 178 Emmet St., Newark, N. J. (See page 36.)
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Audio Development Co., 123 Bryant Ave., N., Minneapolis, Minn.
Boonton Radio Corp., Boonton, N. J.
Clark Controller Co., 1146 E. 152d St., Cleveland, Ohio
Freed Transformer Co., 72 Spring St., New York, N. Y.
General Transformer Corp., 1250 W. Van Buren St., Chicago, Ill. (See page 23.)
Hadley Co., Robert M., 711 E. 61st St., Los Angeles, Cal.
Halldorson Co., 4500 Ravenswood Ave., Chicago, Ill.
International Transformer Co., 17 W. 20th St., New York, N. Y.
New York Transformer Co., 51 W. 3rd St., New York, N. Y. (See page 123.)
Norwalk Transformer Corp., South Norwalk, Conn.
Raytheon Mfg. Co., 190 Willow St., Waltham, Mass. (See page 150.)
RCA Mfg. Co., Camden, N. J.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Sola Electric Co., 2525 Clybourn Ave., Chicago, Ill. (See page 7.)
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill. (See p. 145.)
Superior Electric Co., 32 Harrison St., Bristol, Conn.
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill. (See p. 130.)
United Transformer Co., 150 Varick St., New York, N. Y. (See page 2.)

Tubes

CATHODE RAY TUBES

American Television Corp., 130 W. 56th St., New York, N. Y.
DuMont Laboratories, Inc., Allen B., 2 Main Ave., Passaic, N. J. (See page 118.)
Farnsworth Television & Radio Corp., 3700 Pontiac St., Ft. Wayne, Ind.
General Electric Co., Schenectady, N. Y. (See page 79.)
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributor for Western Electric Co., New York, N. Y.)
Hygrade Sylvania Corp., 60 Boston St., Salem, Mass. (See page 12.)
National Union Radio Corp., 15 Washington St., Newark, N. J.
RCA Mfg. Co., Camden, N. J.
Western Electric Co.—see Graybar Electric Co.

CURRENT REGULATING TUBES (Ballast)

Amperite Co., 561 Broadway, New York, N. Y.
Art Radio Corp., 115 Liberty St., New York, N. Y.
Champion Radio Works, Div. of Consolidated Electric Lamp Co., Danvers, Mass.
Hytron Corp. & Hytronic Laboratories, 76 Lafayette St., Salem, Mass.
RCA Mfg. Co., Camden, N. J.

HEARING AID TUBES

Hytron Corp., & Hytronic Laboratories, 76 Lafayette St., Salem, Mass. (See page 95.)
Ken-Rad Tube & Lamp Corp., Owensboro, Ky.
Raytheon Production Corp., 420 Lexington Ave., New York, N. Y.
RCA Mfg. Co., Camden, N. J.

INDUSTRIAL TUBES

Amperex Electronic Products, 79 Washington St., Brooklyn, N. Y. (See inside front cover.)
Continental Electric Co., Geneva, Ill.
Electrons, Inc., 127 Sussex Ave., Newark, N. J.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
General Electric Co., Schenectady, N. Y. (See page 79.)
Heintz & Kaufman, Ltd., South San Francisco, Cal.
Hytron Corp. & Hytronic Laboratories, 76 Lafayette St., Salem, Mass. (See page 95.)
J. F. D. Mfg. Co., 4111 Fort Hamilton Pkwy., Brooklyn, N. Y.
Raytheon Production Corp., 420 Lexington Ave., New York, N. Y.
RCA Mfg. Co., Camden, N. J. (See page 87.)
Taylor Tubes, Inc., 2341 Wabansia Ave., Chicago, Ill.
United Electronics Co., 42 Spring St., Newark, N. J.
Westinghouse Lamp Div., Westinghouse Electric & Mfg. Co., Bloomfield, N. J.

PHOTOTUBES

Bradley Laboratories, 82 Meadow St., New Haven, Conn. (See page 161.)
Continental Electric Co., Geneva, Ill. (See page 148.)
De Jur-Amsco Corp., 6 Bridge St., Shelton, Conn.
De Vry, Herman A., 1111 W. Center St., Chicago, Ill.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Emby Products Co., 1800 W. Pico Blvd., Los Angeles, Cal.
General Electric Co., Schenectady, N. Y. (See page 79.)
General Scientific Corp., 4829 S. Kedzie Ave., Chicago, Ill.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
National Union Radio Corp., 15 Washington St., Newark, N. J.
Photobell Corp., 123 Liberty St., New York, N. Y.
RCA Mfg. Co., Camden, N. J. (See back cover.)
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
Rhamstine, J. Thos., 301 Beaubien St., Detroit, Mich.
Western Electric Co.—see Graybar Electric Co.
Westinghouse Lamp Div., Westinghouse Electric & Mfg. Co., Bloomfield, N. J.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

RECEIVING TUBES

Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y. (See page 79.)
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hygrade Sylvania Corp., 60 Boston St., Salem, Mass. (See page 12.)
Hytron Corp. & Hytronic Laboratories, 76 Lafayette St., Salem, Mass. (See page 95.)
Ken-Rad Tube & Lamp Corp., 227 E. Ninth St., Owensboro, Ky.
National Union Radio Corp., 15 Washington St., Newark, N. J.
Raytheon Production Corp., 420 Lexington Ave., New York, N. Y.
RCA Mfg. Co., Camden, N. J. (See page 87.)
Tung-Sol Lamp Works Inc., 95 Eighth Ave., Newark, N. J.
Western Electric Co.—see Graybar Electric Co.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

TRANSMITTING TUBES

Amperex Electronic Products, 79 Washington St., Brooklyn, N. Y. (See inside front cover.)
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Eitel-McCullough, Inc., San Bruno, Cal. (See page 115.)
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
General Electric Co., Schenectady, N. Y. (See page 79.)
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributor for Western Electric Co., New York, N. Y.)
Heintz & Kaufman, Ltd., South San Francisco, Cal. (See page 30.)
Hytron Corp. & Hytronic Laboratories, 76 Lafayette St., Salem, Mass. (See page 95.)
National Union Radio Corp., 15 Washington St., Newark, N. J.
Radio Specialties Co., 1956 Figueroa St., San Francisco, Cal.
Raytheon Production Corp., 420 Lexington Ave., New York, N. Y.
RCA Mfg. Co., Camden, N. J. (See back cover.)
Taylor Tubes, Inc., 2341 Wabansia Ave., Chicago, Ill.
Tung-Sol Lamp Works, Inc., 95 Eighth Ave., Newark, N. J.
United Electronics Co., 42 Spring St., Newark, N. J.
Western Electric Co.—see Graybar Electric Co.
Westinghouse Lamp Div., Westinghouse Electric & Mfg. Co., Bloomfield, N. J.

VOLTAGE-REGULATING TUBES

Amperite Co., 561 Broadway, New York, N. Y.
Fleron & Son, Inc., M. M., 113 N. Broad St., Trenton, N. J.
Hygrade Sylvania Corp., 60 Boston St., Salem, Mass. (See page 12.)
Hytron Corp., & Hytronic Laboratories, 76 Lafayette St., Salem, Mass.
RCA Mfg. Co., Camden, N. J.

X-RAY TUBES

Adlanco X-Ray Corp., 54 Lafayette St., New York, N. Y.
Fischer & Co., H. G., 2323 Wabansia Ave., Chicago, Ill.
General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago, Ill.
Machlett Laboratories, Springdale, Conn.
Philips Metalix Corp., 419 Fourth Ave., New York, N. Y.
Standard X-Ray Co., 1930 N. Burling St., Chicago, Ill.
Westinghouse X-Ray Co., 21-16 43d Ave., Long Island City, N. Y.

Tubing

BRASS and COPPER TUBES and TUBING

American Brass Co., Waterbury, Conn.
Bridgeport Brass Co., E. Main St., Bridgeport, Conn.
Chase Brass & Copper Co., 236 Grand St., Waterbury, Conn.
Mueller Brass Co., 1925 Lapeer Ave., Port Huron, Mich.
Precision Tube Co., 3828 Terrace St., Philadelphia, Pa.
Revere Copper & Brass, Inc., 230 Park Ave., New York, N. Y.
Scovill Mfg. Co., 99 Mill St., Waterbury, Conn.
Universal Brass Works, Howard & Lehigh Ave., Philadelphia, Pa.
Wolverine Tube Co., 1411 Central Ave., Detroit, Mich.

CERAMIC TUBING—see Insulation
FIBRE TUBING—see Insulation

FABRIC TUBES and TUBING

Anchor Webbing Co., 1005 Main St., Pawtucket, R. I.
B & C Insulation Products, Inc., 22 W. 21st St., New York, N. Y. (See page 160.)
Bentley, Harris Mfg. Co., Hector & Lime Sts., Conshohocken, Pa. (See page 154.)
Brand & Co., William, 276 Fourth Ave., New York, N. Y. (See page 15.)
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Insulation Products, Inc., 22 W. 21st St., New York, N. Y.
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Mica Insulator Co., 200 Varick St., New York, N. Y.
Mitchell-Rand Insulation Co., 51 Murray St., New York, N. Y.
Pearce Co., R. T., 235 Scott Blvd., Covington, Ky.
Surprenant Electrical Insulation Co., 84 Purchase St., Boston, Mass.
Varflex Corp., Cor. Ford & Floral Sts., Rome, N. Y. (See page 172.)

GLASS TUBES and TUBING

Bentley, Harris Mfg. Co., Hector & Lime Sts., Conshohocken, Pa. (See page 154.)
Corning Glass Works, Corning, N. Y.
Duro-Test Corp., North Bergen, N. J.
Hygrade Sylvania Corp., 60 Boston St., Salem, Mass.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill..
Luminous Laboratories, Inc., 6 E. Lake St., Chicago, Ill.
Owens-Corning Fiberglas Corp., Nicholas Bldg., Toledo, Ohio
Riedel Glass Works, Inc., Jos., 261 Fifth Ave., New York, N. Y.
St. Charles Technical Laboratories, Inc. 10 State Ave., St. Charles, Ill.

KNITTED WIRE TUBES and TUBING

Alden Products Co., 117 Main St., Brockton, Mass.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Camden Wire Co., Camden, N. Y.
Essex Wire Corp., 14310 Woodward Ave., Detroit, Mich.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Hope Webbing Co., Providence, R. I.
New England Electrical Works, Lisbon, N. H.
Roebling's Sons Co., John A., Trenton, N. J.

NICKEL and NICKEL ALLOY TUBING

Admak Mfg. Co., Irvington, N. J.
General Plate Div., Metals & Controls Corp., 34 Forest St., Attleboro Mass.
International Nickel Co., 67 Wall St., New York, N. Y.
Summerill Tubing Co., Bridgeport, Pa.
Superior Tube Co., Norristown, Pa. (See page 11.)

PAPER TUBES and TUBING

American Paper Tube Co., Hazel St., Woonsocket, R. I.
Cleveland Container Co., 10630 Berea Rd., Cleveland, Ohio
Cross Paper Products Corp., 2595 Third Ave., New York, N. Y.
Franklin Fibre-Lamitex Corp., 12th & French Sts., Wilmington, Del.
General Paper Tube Co., 430 E. Chelton Ave., Philadelphia, Pa.
Pairpoint Corp., Prospect St., New Bedford, Mass.
Paramount Paper Tube Co., 801 Glasgow Ave., Fort Wayne, Ind.

Precision Paper Tube Co., 2033 W. Charleston St., Chicago, Ill.
Sonoco Products Co., Hartsville, S. C.
Stone Paper Tube Co., 900 Franklin St., N. E., Washington, D. C.
PHENOLIC TUBING—see Insulation

Turntables

PHONOGRAPH and TRANSCRIPTION TURNTABLES

Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio
Bateman Sound Systems, 680 Johnston St., Akron, Ohio
Electrical Industries Mfg. Co., Red Bank, N. J.
Electro Acoustic Co., 2131 Bueter Rd., Fort Wayne, Ind.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Gates Companies, 200 Block Hampshire St., Quincy, Ill.
General Communication Products Co., Lexington Ave. at Vine, Hollywood, Cal.
General Industries Co., 3537 Taylor St., Elyria, Ohio
Harris Mfg. Co., 2422 W. Seventh St., Los Angeles, Cal.
Mellaphone Corp., 65 Atlantic Ave., Rochester, N. Y.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Presto Recording Corp., 242 W. 55th St., New York, N. Y.
Proctor Co., B. A., 2 W. 45th St., New York, N. Y.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
Ray Lab, Inc., 211 Railroad Ave., Elmira, N. Y.
RCA Mfg. Co., Camden, N. J.
Rek-O-Kut Corp., 173 Lafayette St., New York, N. Y.
Robinson Recording Laboratories, 35 S. Ninth St., Philadelphia, Pa.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Talking Devices Co., 4451 W. Irving Park Rd., Chicago, Ill.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.
Warner Co., J. J., 1244 Larkin St., San Francisco, Cal.
Waters-Conley Co., Rochester, Minn.

Varnish

see Finishes

Vibrators

HOME and AUTO RADIO VIBRATORS

American Television & Radio Corp., 300 E. 4th St., St. Paul, Minn.
Electrical Products Co., 6535 Russell St., Detroit, Mich.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind. (See page 50.)
Oak Mfg. Co., 1260 Clybourn Ave., Chicago, Ill.
Radiart Corp., 3571 W. 62 St., Cleveland, Ohio
Turner Co., 909 17th St., N. E., Cedar Rapids, Iowa.
United Motors Service, 3044 W. Grand Blvd., Detroit, Mich.
Utah Radio Products Co., 820 Orleans St., Chicago, Ill.
Vibrapower Co., James, 1551 Thomas St., Chicago, Ill.

Washers

LOCK WASHERS

American Nut & Bolt Fastener Co., 2045 Doerr St., Pittsburgh, Pa.
Clark Bros. Bolt Co., Milldale, Conn.
Eaton Mfg. Co., Reliance Spring Washer Div., Massillon, Ohio
Harper Co., H. M., 2630 Fletcher St., Chicago, Ill.
Hobbs Mfg. Co., 26 Salisbury St., Worcester, Mass.
Industrial Screw & Supply Co., 711 W. Lake St., Chicago, Ill.
Lewis Bolt & Nut Co., 504 Malcolm Ave., S. E., Minneapolis, Minn.
Line Material Co., 740 N. Second St., Milwaukee, Wis.
National Lock Washer Co., 40 Hermon St., Newark, N. J.
Palnut Co., 61 Cordier St., Irvington, N. J.
Philadelphia Steel & Wire Corp., Penn St. & Belfield Ave., Philadelphia, Pa.
Positive Lock Washer Co., 181 Miller St., Newark, N. J.
Shakeproof, Inc., 2565 N. Keeler Ave., Chicago, Ill.
Thompson-Bremer & Co., 1640 W. Hubbard St., Chicago, Ill.
Wrought Washer Mfg. Co., 2223 S. Bay St., Milwaukee, Wis.

Waxes

WAXES and COMPOUNDS

Allied Asphalt & Mineral Corp., 217 Broadway, New York, N. Y.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y.
Austin Co., M. B., 108-116 S. Desplaines St., Chicago, Ill.
Bakelite Corp., 30 E. 42d St., New York, N. Y.
Benolite Corp., Manor, Pa.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Biwax Corp., 1017 S. Kolmar Ave., Chicago, Ill.
Candy & Co., 2515 W. 35th St., Chicago, Ill.
Cochrane Chemical Co., 432 Danforth Ave., Jersey City, N. J.
Continental-Diamond Fibre Co., 13 Chapel St., Newark, Del.
Dolph Co., John C., 168A Emmett St., Newark, N. J.
duPont Plastic Dept., Arlington, N. J.
Electrical Engineers Equipment Co., 25th Ave. & Division St., Melrose Park, Ill.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Georgia Rosin Products Co., Savannah, Ga.
Glidden Co., 11100 Glidden Ave., Cleveland, Ohio
G & W Electric Specialty Co., 7780 Dante Ave., Chicago, Ill.
Halowax Corp., 247 Park Ave., New York, N. Y.
Impervious Varnish Co., Rochester, Pa.
Insil-X Co., 198 Lafayette Pl., Englewood, N. J.
Insulatine Co., 1 Broadway, New York, N. Y.
Insulation Manufacturers Corp., 565 W. Washington Blvd., Chicago, Ill.
Irvington Varnish & Insulator Co., 10 Argyle Terrace, Irvington, N. J.
Johns-Manville, 22 E. 40th St., New York, N. Y.
Line Material Co., 740 N. Second St., Milwaukee, Wis.
Maas and Waldstein Co., 438 Riverside Ave., Newark, N. J.
McGill Mfg. Co., Box 670, Valparaiso, Ind.
Minerallac Electric Co., 25 N. Peoria St., Chicago, Ill.
Mitchell-Rand Insulation Co., 51 Murray St., New York, N. Y.
Nukem Products Corp., 70 Niagara St., Buffalo, N. Y.
Okonite Co., Canal St., Passaic, N. J.
Pioneer Asphalt Co., 435 N. Michigan Ave., Chicago, Ill.
Robertson Chemical Co., 9808 Meech Ave., Cleveland, Ohio
Rockbestos Products Corp., 308 Nicoll St., New Haven, Conn.
Roebling's Sons Co., John A., Trenton, N. J.
Rusgreen Mfg. Co., 14262 Birwood Ave., Detroit, Mich.
Sauereisen Cements Co., Sharpsburg Station, Pittsburgh, Pa.
Sterling Varnish Co., Haysville, Pa.
Trotter & Co., E. T., 594 Johnson Ave., Brooklyn, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Zophar Mills, Inc., 112-26th St., Brooklyn, N. Y. (See page 173.)

WINDINGS—see Coils

Wire

POWER CORDS

Alden Products Co., 117 Main St., Brockton, Mass.
Alpha Wire Corp., 50 Howard St., New York, N. Y.
American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
American Electric Cable Co., Holyoke, Mass.
American Metal Moulding Co., 146 Coit St., Irvington, N. J.
American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y. (See page 31.)
Ansonia Electrical Wire Co., Ansonia, Conn.
Audio Development Co., 1033 W. Van Buren St., Chicago, Ill.
Austin Co., M. B., 108 S. Desplaines St., Chicago, Ill.
Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Boston Insulated Wire & Cable Co., 65 Bay St., (Dorchester), Boston, Mass. (See page 166.)
Camden Wire Co., Camden, N. Y.
Circle Wire & Cable Corp., 5500 Maspeth Ave., Maspeth, N. Y.
Clarostat Mfg. Co., 285 N. Sixth St., Brooklyn, N. Y.
Collyer Insulated Wire Co., 249 N. Main St., Pawtucket, R. I.
Columbia Cable & Electric Co., Manly St., Long Island City, N. Y.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Copperweld Steel Co., Glassport, Pa.
Cornish Wire Co., 15 Park Row, New York, N. Y.
Crescent Cable Co., Front & Central Ave., Pawtucket, R. I.
Crescent Insulated Wire & Cable Co., N. Olden Ave. & Taylor St., Trenton, N. J.
Diamond Wire & Cable Co., Lowe Ave., Chicago Heights, Ill.
Electric Auto-Lite Co., Wire Div., Port Huron, Mich.
Essex Wire Corp., 37 Manchester St., Detroit, Mich.
Gavitt Mfg. Co., Brookfield, Mass.
General Cable Corp., 420 Lexington, Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
General Insulated Wire Works, 105 Gordon Ave., Providence, R. I.
Graybar Electric Co., Lexington, Ave. at 43d St., New York, N. Y. (Sole Distributors for Whitney Blake Co., New Haven, Conn.)
Guthman Co., Edwin I., 400 S. Peoria St., Chicago, Ill.
Habirshaw Cable & Wire Corp., 40 Wall St., New York, N. Y.
Hatfield Wire & Cable Co., Hillside, N. J.
Hazard Insulated Wire Works, Div. of The Okonite Co., Wilkes-Barre, Pa.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Kellogg Switchboard & Supply Co., 6650 S. Cicero Ave., Chicago, Ill.
Kennecott Wire & Cable Co., Phillipsdale, R. I.
Kerite Insulated Wire & Cable Co., Seymour, Conn.
Knickerbocker Annunciator Co., 116 West St., New York, N. Y.
Lenz Electric Mfg. Co., 1751 N. Western Ave., Chicago, Ill.
Midland Wire Corp., 70 Hunter St., Tiffin, Ohio
National Electric Products Corp., Fulton Bldg., Pittsburgh, Pa.
New England Cable Co., Concord, N. H.
New York Insulated Wire Co., 295 Madison Ave., New York, N. Y.
Okonite Co., Passaic, N. J.
Packard Electric Div., General Motors Corp., Warren, Ohio
Paranite Wire & Cable Corp., Jonesboro, Ind.
Phelps Dodge Copper Products Corp., American Copper Products Div., 40 Wall St., New York, N. Y.
Philadelphia Insulated Wire Co., 220 N. Third St., Philadelphia, Pa.
Rockbestos Products Corp., 308 Nicoll St., New Haven, Conn.
Roebling's Sons Co., John A., Trenton, N. J.
Rome Cable Corp., Rome, N. Y.
Runzel Cord & Wire Co., 4731 W. Montrose Ave., Chicago, Ill.
Simplex Wire & Cable Corp., 79 Sidney St., Cambridge, Mass.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Triangle Conduit & Cable Co., New Brunswick, N. J.
United States Rubber Co., 1230 Sixth Ave., New York, N. Y.
Upson Walton Co., 1286 W. 11th St., Cleveland, Ohio

Walker Bros., Conshohocken, Pa.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wheeler Insulated Wire Co., 378 Washington Ave., Bridgeport, Conn.
Whitney Blake Co.—see Graybar Electric Co.
York Insulated Wire Works Div. of General Electric Co., York, Pa.

ANTENNA WIRE

Acme Wire Co., New Haven, Conn.
Alpha Wire Corp., 50 Howard St., New York, N. Y.
American Brass Co., Waterbury, Conn.
American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio
Boston Insulated Wire & Cable Co., 65 Bay St., (Dorchester), Boston, Mass. (See page 166.)
Chase Brass & Copper Co., 236 Grand St., Waterbury, Conn.
Crescent Insulated Wire & Cable Co., Olden & Taylor Aves., Trenton, N. J.
Electric Auto-Lite Co., Wire Div., Port Huron, Mich.
Gavitt Mfg. Co., Brookfield, Mass.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Keystone Steel & Wire Co., Peoria, Ill.
New England Electrical Works, 365 Main St., Lisbon, N. H.
Roebling's Sons Co., John A., Trenton, N. J.
Spargo Wire Co., 255 E. Railroad Ave., Rome, N. Y.

HIGH VOLTAGE WIRE

Alpha Wire Corp., 50 Howard St., New York, N. Y.
American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y. (See page 31.)
Boston Insulated Wire & Cable Co., 65 Bay St., (Dorchester), Boston, Mass. (See page 166.)
Crescent Insulated Wire & Cable Co., Olden & Taylor Aves., Trenton, N. J.
Diamond Wire & Cable Co., 128 E. 16th St., Chicago Heights, Ill.
Driver-Harris Co., Harrison, N. J.
Driver Co., Wilbur B., Riverside Ave., Newark, N. J.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Whitney Blake Co., New Haven, Conn.)
Habirshaw Cable & Wire Corp., 40 Wall St., New York, N. Y.
Industrial Pyrometer & Supply Co., 142 Hack St., Alton, Ill.
Jeliff Mfg. Corp., C. O., 200 Pequot Ave., Southport, Conn.
National Electric Products Corp., Fulton Bldg., Pittsburgh, Pa.
Okonite Co., Canal St., Passaic, N. J.
Phelps Dodge Copper Products Corp., 40 Wall St., New York, N. Y.
Rhode Island Insulated Wire Co., 50 Burnham Ave., Providence, R. I.
Rockbestos Products Corp., 309 Nicoll St., New Haven, Conn.
Roebling's Sons Co., John A., Trenton, N. J.
Rome Cable Corp., 330 Ridge St., Rome, N. Y.
Whitney Blake Co.—see Graybar Electric Co.
York Insulated Wire Works Div., General Electric Co., York, Pa.

HOOKUP WIRE

Acorn Insulated Wire Co., 225 King St., Brooklyn, N. Y.
Alden Products Co., 715 Center St., Brockton, Mass.
Alpha Wire Corp., 50 Howard St., New York, N. Y.
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y. (See page 31.)
Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Birnbach Radio Co., 145 Hudson St., New York, N. Y.
Boston Insulated Wire & Cable Co., 65 Bay St., (Dorchester) Boston, Mass.
Consolidated Wire & Associated Corps., Peoria & Harrison Sts., Chicago, Ill.
Cornish Wire Co., 15 Park Row, New York, N. Y.
Crescent Insulated Wire & Cable Co., Trenton, N. J.
Electric Auto-Lite Co., Wire Div., Port Huron, Mich.
Essex Wire Corp., 14310 Woodward Ave., Detroit, Mich.
Fleron & Son, Inc., M. M., 113 N. Broad St., Trenton, N. J.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Insulated Wire Corp., 53 Park Pl., New York, N. Y.
Lenz Electric Mfg. Co., 1751 N. Western Ave., Chicago, Ill.
Lowell Insulated Wire Co., 171 Lincoln St., Lowell, Mass.
Phelps Dodge Copper Products Corp., 40 Wall St., New York, N. Y.
Plastoid Corp., 17 Vandewater St., New York, N. Y.
Precision Tube Co., 3828 Terrace St., Philadelphia, Pa.
Rockbestos Products Corp., 308 Nicoll St., New Haven, Conn.

MAGNET WIRE

Acme Wire Co., 1255 Dixwell Ave., New Haven, Conn.
American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio
Anaconda Wire & Cable Co., 25 Broadway, New York, N. Y. (See page 31.)
Ansonia Electrical Co., Ansonia, Conn.
Belden Mfg. Co., 4647 W. Van Buren St., Chicago, Ill.
Bradford, Kyle & Co., Plymouth, Mass.
Chase Brass & Copper Co., 236 Grand St., Waterbury, Conn.
Cornish Wire Co., 15 Park Row, New York, N. Y.
Crescent Insulated Wire & Cable Co., Olden & Taylor Aves., Trenton, N. J.
Electric Auto-Lite Co., Wire Div., Port Huron, Mich.
Essex Wire Corp., 14310 Woodward Ave., Detroit, Mich.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
Holyoke Wire & Cable Corp., 720 Main St., Holyoke, Mass.
Kennecott Wire & Cable Co. (Phillipsdale), Providence, R. I.
Lenz Electric Mfg. Co., 1751 N. Western Ave., Chicago, Ill.
Massachusetts Electric Mfg. Co., 11 Margin St., West Lynn, Mass.
New England Electrical Works, Lisbon, N. H.
Phelps Dodge Copper Products Corp., 40 Wall St., New York, N. Y.
Philadelphia Insulated Wire Co., 200 N. Third St., Philadelphia, Pa.
Rea Magnet Wire Co., E. Pontiac St., Fort Wayne, Ind.
Rockbestos Products Corp., 308 Nicoll St., New Haven, Conn.
Roebling's Sons Co., John A., Trenton, N. J.
Rome Cable Corp., 330 Ridge St., Rome, N. Y.
Wheeler Insulated Wire Co., 378 Washington Ave., Bridgeport, Conn.
Winsted Div. of Hudson Wire Co., Winsted, Conn. (See page 97.)

RESISTANCE and FILAMENT WIRE

Alloy Metal Wire Co., 13th St. & Pennsylvania Ave., Moore, Pa.
American Brass Co., Waterbury, Conn.
American Steel & Wire Co., Rockefeller Bldg., Cleveland, Ohio
Callite Tungsten Corp., 544 39th St., Union City, N. J.
Cohn, Sigmund, 44 Gold St., New York, N. Y. (See page 148.)
Driver Co., Wilbur B., 150 Riverside Ave., Newark, N. J.
Driver-Harris Co., 201 Middlesex St., Harrison, N. J.
Hoskins Mfg. Co., 4447 Lawton Ave., Detroit, Mich.
Jelliff Mfg. Corp., C. O., 200 Pequot Ave., Southport, Conn.
Prentiss & Co., George W., 439 Dwight St., Holyoke, Mass.
Rockbestos Products Corp., 308 Nicoll St., New Haven, Conn.

SHIELDED WIRE

Belden Mfg. Co., 4673 W. Van Buren St., Chicago, Ill.
General Cable Corp., 420 Lexington Ave., New York, N. Y.
Precision Tube Co., 3828 Terrace St., Philadelphia, Pa. (See page 147.)
Uniform Tubes, Shurs Lane & Lauriston St., Roxborough, Philadelphia, Pa. (See page 176.)

ELECTRICAL INSTRUMENTS

Adapters

TEST ADAPTERS

Alden Products Co., 117 Main St., Brockton, Mass.
American Radio Hardware Co., 476 Broadway, New York, N. Y.
Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Million Radio & Television Labs., 685 W. Ohio St. Chicago, Ill.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Readrite Meter Works, College Ave., Bluffton, Ohio
Triplett Electrical Instrument Corp., 286 Hermon Rd., Bluffton, Ohio.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Webber Co., Earl, 4358 W. Roosevelt Rd., Chicago, Ill.

Ammeters

see Meters

Analyzers

CIRCUIT ANALYZERS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Audio-Tone Oscillator Co., 60 Walter St., Bridgeport, Conn.
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Electrical Research Products Inc., 76 Varick St., New York, N. Y.
Ferris Instrument Corp., Boonton, N. J.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Hewlett-Packard Co., 481 Page Mill Rd., Palo Alto, Cal.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
H-W Mfg. Co., 3124 Larga Ave., Los Angeles, Cal.
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Jones-Orme Co., 1645 Hennepin Ave., St. Paul Minn.
Mallory & Co., P. R., 3029 E. Washington St., Indianapolis, Ind.
Meissner Mfg. Co., Mt. Carmell, Ill.
Million Radio & Television Laboratories, 1617 N. Damen Ave., Chicago, Ill.
Morrison Co., J. L. D., Silver Spring, Md.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Precision Apparatus Co., 647 Kent Ave., Brooklyn, N. Y.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Readrite Meter Works, College Ave., Bluffton, Ohio
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill.
Supreme Instruments Corp., Greenwood, Miss.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Webber Co., Earl, 4358 W. Roosevelt Rd., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

HARMONIC ANALYZERS

Gaertner Scientific Corp., 1201 Wrightwood Ave., Chicago, Ill.
General Radio Co., 30 State St., Cambridge, Mass.
Hewlett-Packard Co., 481 Page Mill Rd., Palo Alto, Cal.
Mico Instrument Co., 10 Arrow St., Cambridge, Mass.
Scientific Apparatus Co., 4 Landscape Ave., Yonkers, N. Y.
United Transformer Co., 150 Varick St., New York, N. Y.

NOISE ANALYZERS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Deutschmann Corp., Tobe, Canton, Mass.
Electrical Research Products, Inc., 195 Broadway, New York, N. Y.
Ferris Instrument Corp., Boonton, N. J.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Jones-Orme Co., 1645 Hennepin Ave., St. Paul, Minn.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
RCA Mfg. Co., Camden, N. J.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Sprague Specialties Co., 189 Beaver St., North Adams, Mass.
Televiso Products, Inc., 2400 Sheffield Ave., Chicago, Ill.
Webber Co., Earl, 4358 W. Roosevelt Rd., Chicago, Ill.

TRANSMISSION ANALYZERS

Daven Co., 158 Summit St., Newark, N. J.

Bridges

ELECTRICAL MEASUREMENT BRIDGES

see also Analyzers
also Testers

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Communication Measurements Laboratory, 136 Liberty St., New York, N. Y.
Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J.
Deutschmann Corp., Tobe, Canton, Mass.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Muter Co., 1255 S. Michigan Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Roller-Smith Co., Bethlehem, Pa.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa. (See page 6.)
Solar Mfg. Corp., Bayonne, N. J.
Standard Apparatus Co., S. Wentworth Ave. & 51st St., Chicago, Ill.
Supreme Instruments Corp., Greenwood, Miss.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Thwing-Albert Instrument Co., Penn St. & Pulaski Ave., Philadelphia, Pa.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.

Forks

ELECTRICALLY DRIVEN TUNING FORKS

American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Chicago Apparatus Co., 1735 N. Ashland Ave., Chicago, Ill.
Electric Tachometer Corp., 1354 Spring Garden St., Philadelphia, Pa.
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
Gaertner Scientific Corp., 1201 Wrightwood Ave., Chicago, Ill.
General Radio Co., 30 State St., Cambridge, Mass.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.

Galvanometers

see Meters

Generators

SIGNAL GENERATORS

Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Bendix Marine Products Div., Bendix Aviation Corp., 754 Lexington Ave., Brooklyn, N. Y.
Boonton Radio Corp., Boonton, N. J. (See page 126.)
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Ferris Instrument Corp., Boonton, N. J. (See page 174.)
General Radio Co., 30 State St., Cambridge, Mass.
Hewlett-Packard Co., 481 Page Mill Rd., Palo Alto, Cal.
Measurements Corp., Boonton, N. J. (See page 159.)
Million Radio & Television, 1617 N. Damen Ave., Chicago, Ill.
Monarch Mfg. Co., 2014 N. Major Ave., Chicago, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Precision Apparatus Co., 647 Kent Ave., Brooklyn, N. Y.
Radex Corp., 1328 Elston Ave., Chicago, Ill.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill.
Superior Instruments Co., 227 Fulton St., New York, N. Y.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Triplett Electrical Instru. Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Webber Co., Earl, 4358 W. Roosevelt Rd., Chicago, Ill.

SQUARE WAVE GENERATORS

General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Hewlett-Packard Co., 481 Page Mill Rd., Palo Alto, Cal.
Measurements Corp., Boonton, N. J.

Indicators

CAPACITOR LEAKAGE INDICATORS

Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J.
Deutschmann Corp., Tobe, Canton, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Leeds & Northup Co., 4970 Stenton Ave., Philadelphia, Pa.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

NEON INDICATORS

Fleron & Son, Inc., M. M., 113 N. Broad St., Trenton, N. J.
Littelfuse, Inc., 4755 Ravenswood Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.

POWER LEVEL INDICATORS

see Meters

Clough-Brengle Co., 501 Broadway, Chicago, Ill.
Daven Co., 158 Summit St., Newark, N. J.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Monarch Mfg. Co., 2014 N. Major ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

VOLUME INDICATORS—see Meters

Meters

AMMETERS

Bristol Co., Waterbury, Conn.
Burton-Rogers Co., 857 Boylston St., Boston, Mass. (Sole Distributors for Hoyt Electrical Instrument Works Boston, Mass.)
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Columbia Electric Mfg. Co., 4519 Hamilton Ave., Cleveland, Ohio
De Jur-Amsco Corp., 6 Bridge St., Shelton, Conn.
Engelhard, Inc., Charles, 90 Chestnut St., Newark, N. J.
Esterline-Angus Co., (Speedway City), Indianapolis, Ind.
Ferranti Electric, Inc., 30 Rockefeller Plaza, New York, N. Y.
General Electric Co., Schenectady, N. Y.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Hoyt Electrical Instrument Works—see Burton-Rogers Co.
J B L Instrument Co., Darby, Pa.
King-Seeley Corp., Ann Arbor, Mich.
Leeds & Northup Co., 4970 Stenton Ave., Philadelphia, Pa.
Norton Electrical Instrument Corp., 79 Hilliard St., Manchester, Conn.
Precision Apparatus Co., 647 Kent Ave., Brooklyn, N. Y.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
RCA Mfg. Co., Camden, N. J.
Readrite Meter Works, College Ave., Bluffton, Ohio
Reliance Instrument Co., 1135 W. Van Buren St., Chicago, Ill.
Roller-Smith Co., Bethlehem, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill. (See page 44.)
Superior, Instruments Co., 227 Fulton St., New York, N. Y.
Supreme Instruments Corp., Greenwood, Miss.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. (See page 4.)
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J. (See page 125.)
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.
Winslow Co., 9 Liberty St., Newark, N. J.

FREQUENCY METERS

Bendix Radio, Div. of Bendix Aviation Corp., Baltimore, Md.

Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Bliley Electric Co., Erie, Pa.
Bristol Co., Waterbury, Conn.
Browning Laboratories, Inc., 750 Main St., Winchester, Mass. (See p. 109.)
Burnett, Wm. W. L., 4814 Idaho St., San Diego, Cal.
Cardwell Mfg. Corp., Allen D., 81 Prospect St., Brooklyn, N. Y.
Doolittle Radio, Inc., 7421 Loomis Blvd., Chicago, Ill. (See page 142.)
Esterline-Angus Co., (Speedway City) Indianapolis, Ind.
Ferris Instrument Corp., Boonton, N. J.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Lampkin Laboratories, Bradenton, Fla. (See page 181.)
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Lavoie Laboratories, 656 Broadway, Long Branch, N. J. (See page 166.)
Millen Mfg. Co., 150 Exchange St., Malden, Mass.
RCA Mfg. Co., Camden, N. J.
Roller-Smith Co., Bethlehem, Pa.
Sound Apparatus Co., 150 W. 146 St., New York, N. Y. (See page 153.)
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. (See page 4.)
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J. (See page 38.)

GALVANOMETERS

Brown Instrument Co., 4428 Wayne Ave., Philadelphia, Pa.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Chicago Apparatus Co., 1735 N. Ashland Ave., Chicago, Ill.
De Jur-Amsco Corp., 6 Bridge St., Shelton, Conn. (See page 128.)
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
General Electric Co., Schenectady, N. Y.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Heiland Research Corp., Club Bldg., Denver, Col.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
J-B-T Instruments, Inc., 441 Chapel St., New Haven, Conn.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Pfaltz & Bauer, Inc., 350 Fifth Ave., New York, N. Y.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
RCA Mfg. Co., Camden, N. J.
Roller-Smith Co., Bethlehem, Pa.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Thwing-Albert Instrument Co., Penn St. & Pulaski Ave., Philadelphia, Pa.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

MODULATION METERS

Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
General Radio Co., 30 State St., Cambridge, Mass.
RCA Mfg. Co., Camden, N. J.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

OHMMETERS

Associated Research, Inc., 431 S. Dearborn St., Chicago, Ill.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Borden Electric Co., Summit, N. J.
Burton-Rogers Co., 857 Boylston St., Boston, Mass. (Sole Distributors for Hoyt Electrical Instrument Works, Boston, Mass.)
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Esterline-Angus Co., (Speedway City) Indianapolis, Ind.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Gray Instrument Co., 64 W. Johnson St., (Germantown) Philadelphia, Pa.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Hoyt Electrical Instrument Works—see Burton-Rogers Co.
Industrial Instrument Co., 2249 14th St., S. W., Akron, Ohio
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Illinois Testing Laboratories, 420 N. La Salle St., Chicago, Ill.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Martindale Electric Co., 1371 Hird Ave., Cleveland, Ohio
Norton Electric Instrument Co., 79 Hilliard St., Manchester, Conn.
Precision Apparatus Co., 647 Kent Ave., Brooklyn, N. Y.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
RCA Mfg. Co., Camden, N. J.
Roller-Smith Co., Bethlehem, Pa.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill. (See page 44.)
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. (See page 4.)
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

PHASE ANGLE METERS

Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
RCA Mfg. Co., Camden, N. J.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

POWER LEVEL METERS—see Indicators

"Q". METERS

Boonton Radio Corp., Boonton, N. J. (See page 126.)

THERMOCOUPLE METERS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
General Electric Co., Schenectady, N. Y.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Roller-Smith Co., Bethlehem, Pa.
Sensitive Research Instrument Co., 4545 Bronx Blvd., New York, N. Y.
Therm-Electric Meters Co., Ithaca, N. Y.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

VACUUM TUBE VOLTMETERS

Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Ballantine Laboratories, Inc., Boonton, N. J.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Ferris Instrument Corp., Boonton, N. J.
Fisher Scientific Co., 711 Forbes St., Pittsburgh, Pa.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Hewlett-Packard Co., 481 Page Mill Rd., Palo Alto, Cal. (See page 92.)
Jackson Electrical Instrument Co., 131 Wayne Ave., Dayton, Ohio
Jones-Orme Co., 1645 Hennepin Ave., St. Paul, Minn.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Measurements Corp., Boonton, N. J. (See page 159.)
Million Radio & Television, 1617 N. Damen Ave., Chicago, Ill.
Precision Apparatus Co., 647 Kent Ave., Brooklyn, N. Y.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
Reliance Instrument Co., 1135 W. Van Buren St., Chicago, Ill.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

VOLTMETERS

American Electrical Sales Co., 67 E. Eighth St., New York, N. Y.
Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Associated Research, Inc., 431 S. Dearborn St., Chicago, Ill. (See page 173.)
Ballantine Laboratories, Inc., Boonton, N. J. (See page 172.)
Burton-Rogers Co., 857 Boylston St., Boston, Mass. (Sole Distributors for Hoyt Electrical Instrument Works, Boston, Mass.)
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
De Jur-Amsco Corp., 6 Bridge St., Shelton, Conn. (See page 128.)
Electric Tachometer Corp., 1354 Spring Garden St., Philadelphia, Pa.
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
Englehard, Inc., Charles, 90 Chestnut St., Newark, N. J.
Esterline-Angus Co. (Speedway City), Indianapolis, Ind.
Etna Electric Works, 410 E. 15th St., New York, N. Y.
Ferranti Electric, Inc., 30 Rockefeller Plaza, New York, N. Y.
Ferris Instrument Corp., Boonton, N. J. (See page 174.)
Fisher Scientific Co., 711 Forbes St., Pittsburgh, Pa.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass. (See page 101.)
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Hoyt Electrical Instrument Works—see Burton-Rogers Co.
J B L Instrument Co., Darby, Pa.
Jones-Orme Co., 1645 Hennepin Ave., St. Paul, Minn.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Million Radio & Television, 1617 N. Damen Ave., Chicago, Ill.
Norton Electrical Instrument Co., 79 Hilliard St., Manchester, Conn.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Reliance Instrument Co., 1135 W. Van Buren St., Chicago, Ill.
Roller-Smith Co., Bethlehem, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill. (See page 44.)
Supreme Instruments Corp., Greenwood, Miss.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. (See page 4.)
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J. (See page 38.)
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

VOLUME INDICATOR METERS

Amplifier Co. of America, 17 W. 20th St., New York, N. Y.

Cinema Engineering Co., 1508 S. Verdugo Ave., Burbank, Cal.
Daven Co., 158 Summit St., Newark, N. J.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

WATTMETERS

Bristol Co., Waterbury, Conn.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Esterline-Angus Co. (Speedway City), Indianapolis, Ind.
General Electric Co., Schenectady, N. Y.
J B L Instrument Co., Darby, Pa.
Leeds & Northrup Co., 4918 Stenton Ave., Philadelphia, Pa.
Norton Electrical Instrument Co., Manchester, Conn.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Reliance Instrument Co., 1135 W. Van Buren St., Chicago, Ill.
Roller-Smith Co., Bethlehem, Pa.
Sangamo Electric Co., Springfield, Ill.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

Microammeters

see Ammeters

Microfaradmeters

see Bridges

Milliammeters

see Ammeters

Multipliers

VOLTMETER MULTIPLIERS

Farnsworth Television & Radio Corp., Fort Wayne, Ind.
General Electric Co., Schenectady, N. Y.
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J.
Precision Resistor Co., 334 Badger Ave., Newark, N. J.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.

Ohmmeters

see Meters

Oscillators

AUDIO-FREQUENCY OSCILLATORS

Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Audio-Tone Oscillator Co., 60 Walter St., Bridgeport, Conn.
Boonton Radio Corp., Boonton, N. J.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Carron Mfg. Co., 415 S. Aberdeen St., Chicago, Ill.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Electronic Products Co., St. Charles, Ill.
Ferris Instrument Co., Boonton, N. J.
General Radio Co., 30 State St., Cambridge, Mass.
Hewlett-Packard Co., 481 Page Mill Rd., Palo Alto, Cal. (See page 92.)
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Jackson Electrical Instrument Co., 123 Wayne Ave., Dayton, Ohio. (See page 161.)
Leeds & Northrup Co., 4970 Stenton Ave., Cleveland, Ohio
Lepel High Frequency Laboratory, Inc., 39 W. 60th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Supreme Instruments Corp., Greenwood, Miss.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Turner Co., 909 17th St., N. E., Cedar Rapids, Iowa.

RADIO-FREQUENCY OSCILLATORS

Audio-Tone Oscillator Co., 60 Walter St., Bridgeport, Conn.
Burton-Rogers Co., 857 Boylston St., Boston, Mass. (Sole Distributors for Hoyt Electrical Instrument Works, Boston, Mass.)
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Ferris Instrument Corp., Boonton, N. J.
General Radio Co., 30 State St., Cambridge, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Hoyt Electrical Instrument Works—see Burton-Rogers Co.
Jackson Electrical Instrument Co., 123 Wayne Ave., Dayton, Ohio. (See page 161.)
McFarlin Co., 29 W. Marion Ave., Youngstown, Ohio
Philharmonic Radio Corp., 216 William St., New York, N. Y.
Premier Crystal Laboratories, Inc., 63 Park Row, New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill.
Supreme Instruments Corp., Greenwood, Miss.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Turner Co., 909 17th St., N. E., Cedar Rapids, Iowa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

Oscilloscopes

CATHODE-RAY INSTRUMENTS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Du Mont Laboratories, Inc., Allen B., 2 Main Ave., Passaic, N. J. (See p. 118.)
Electro-Medical Laboratory, Inc., Holliston, Mass.
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
Fredericks Co., George E., Bethayres, Pa.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass. (See page 101.)
Heiland Research Corp., Club Bldg., Denver, Col.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Jackson Electrical Instrument Co., 131 Wayne Ave., Dayton, Ohio
Jones-Orme Co., 1645 Hennepin Ave., St. Paul, Minn.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
RCA Mfg. Co., Camden, N. J.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Supreme Instrument Corp., Greenwood, Miss.
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
United Transformer Co., 150 Varick St., New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

MOVING-CONDUCTOR OSCILLOGRAPHS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

MULTI-ELEMENT OSCILLOGRAPHS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Electro-Medical Laboratory, Inc., Holliston, Mass.
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
General Electric Co., Schenectady, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

PIEZOELECTRIC OSCILLOGRAPHS

Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Electro-Medical Laboratory, Inc., Holliston, Mass.
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
Heiland Research Corp., Club Bldg., Denver, Col.
McFarlin Co., 29 W. Marion Ave., Youngstown, Ohio
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

"Q" Meters

see Meters

Recorders

see Indicators

CAPACITOR LEAKAGE RECORDERS

Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J.
Esterline-Angus Co. (Speedway City), Indianapolis, Ind.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.

FREQUENCY RECORDERS

Sound Apparatus Co., 150 W. 46th St., New York, N. Y.

Shunts

AMMETER SHUNTS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Esterline-Angus Co. (Speedway City), Indianapolis, Ind.
General Electric Co., Schenectady, N. Y.
Gray Instrument Co., 64 W. Johnson St. (Germantown), Philadelphia, Pa.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Roller-Smith Co., Bethlehem, Pa.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

Standards

CAPACITANCE STANDARDS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y
Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J.
General Radio Co., 30 State St., Cambridge, Mass.
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Solar Mfg. Corp., Bayonne, N. J.

FREQUENCY STANDARDS

Andrew, Victor J., 6429 S. Lavergne Ave., Chicago, Ill.
Ferris Instrument Corp., Boonton, N. J.

General Radio Co., 30 State St., Cambridge, Mass.
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass. (See page 165.)
Rosen & Co., Raymond, 32nd & Walnut Sts., Philadelphia, Pa.

INDUCTANCE STANDARDS

Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
New York Transformer Co., 51 W. Third St., New York, N. Y.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.

RESISTANCE STANDARDS

Beck Bros., 421 Sedgley Ave., Philadelphia, Pa.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Instrument Resistors, Inc., 25 Amity St., Little Falls, N. J.
International Resistance Co., 401 N. Broad St., Philadelphia, Pa.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa., (See page 6.)
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.

Testers

BATTERY TESTERS

Burton-Rogers Co., 857 Boylston St., Boston, Mass. (Sole Distributors for Hoyt Electrical Instrument Works, Boston, Mass.)
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Hoyt Electrical Instrument Works—see Burton-Rogers Co.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Rascher & Betzold, 835 Orleans St., Chicago, Ill.
Rieker Instrument Co., 1919 Fairmount Ave., Philadelphia, Pa.
Ruth Class Div., Kimble Glass Co., Conshohocken, Pa.
Testrite Instrument Co., 57 E. 11th St., New York, N. Y.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

CAPACITOR TESTERS

Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Cornell-Dubilier Electric Corp., 1000 Hamilton Blvd., South Plainfield, N. J.
Deutschmann Corp., Tobe, Canton, Mass.
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Solar Mfg. Corp., Bayonne, N. J.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

HIGH VOLTAGE TESTERS

American Transformer Co., 178 Emmet St., Newark, N. J.
Associated Research, Inc., 431 S. Dearborn St., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
Miller Co., Bertrand F., Trenton, N. J.
Minerallac Electric Co., 25 N. Peoria St., Chicago, Ill.
Raytheon Mfg. Co., Waltham, Mass.
Roller-Smith Co., Bethlehem, Pa.
Slayter Electronic Div., Owens-Corning Fiberglas Corp., 26 W. Market St., Newark, Ohio.
States Co., 19 New Park Ave., Hartford, Conn.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

TUBE TESTERS

Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Dayco Radio Corp., 915 Valley St., Dayton, Ohio
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Jackson Electrical Instrument Co., 131 Wayne Ave., Dayton, Ohio. (See page 161.)
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Philharmonic Radio Corp., 216 William St., New York, N. Y.
Precision Apparatus Co., 647 Kent Ave., Brooklyn, N. Y.
Radio City Products Co., 127 W. 26th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Readrite Meter Works, College Ave., Bluffton, Ohio
Simpson Electric Co., 5218 W. Kinzie St., Chicago, Ill. (See page 44.)
Standard Technical Devices, Inc., 3008 Ave. M., Brooklyn, N. Y.
Superior Instruments Co., 227 Fulton St., New York, N. Y.
Supreme Instruments Corp., Greenwood, Miss.
Triplett Electrical Instrument Co., 286 Harmon Rd., Bluffton, Ohio
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Webber Co., Earl, 4358 W. Roosevelt Rd., Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

INSULATION TESTERS

Acme Electric & Mfg. Co., 31 Water St., Cuba, N. Y.
American Transformer Co., 178 Emmet St., Newark, N. J.
Associated Research, Inc., 431 S. Dearborn St., Chicago, Ill.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Electric Service Supplies Co., 17th & Cambria Sts., Philadelphia, Pa.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
Industrial Transformer Corp., 2540 Belmont Ave., New York, N. Y.
J B L Instrument Co., Darby, Pa.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Miller Co., Bertrand F., Trenton, N. J.
Radio Design Co., 1353 Sterling Pl., Brooklyn, N. Y.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Standard Transformer Co., 140 Dana St., N.E., Warren, Ohio
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

Thermocouples

VACUUM THERMOCOUPLES

American Electrical Sales Co., 67 E. Eighth St., New York, N. Y.
Bristol Co., Waterbury, Conn.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Field Electric Instrument Co., 2258 Morris Ave., New York, N. Y.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Western Electric Co.—see Graybar Electric Co.
Xervac Instrument Co., 9 New Park Ave., Hartford, Conn.

Voltmeters

see Meters

Wattmeters

see Meters

ELECTRONIC EQUIPMENT

Aids

HEARING AIDS

Aurex Corp., 1115 N. Franklin St., Chicago, Ill.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Laurehk Radio Mfg. Co., 3918 Monroe Ave., Wayne, Mich.
Maico Co., 2632 Nicollet Ave., Minneapolis, Minn.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Sonotone Corp., Elmsford, N. Y.
Telex Products Co., 1645 Hennepin Ave., Minneapolis, Minn.
Trimm Radio Mfg. Co., 1770 W. Berteau Ave., Chicago, Ill.
Western Electric Co.—see Graybar Electric Co.
Zenith Radio Corp., 6011 Dickens Ave., Chicago, Ill.

Alarms

BOILER GAUGE LEVEL ALARMS

Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
United Cinephone Corp., Torrington, Conn.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

BURGLAR ALARMS

American District Telegraph Co., 155 6th Ave., New York, N. Y.

Automatic Alarms, Inc., Youngstown, Ohio
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Lumenite Electric Co., 37 W. Van Buren St., Chicago, Ill.
O. B. McClintock Co., Minneapolis, Minn.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.
Worner Products Corp., 1019 W. Lake St., Chicago, Ill.

Amplifiers

AUDIO FREQUENCY AMPLIFIERS

Altec Lansing Corp., 6900 McKinley Ave., Los Angeles, Cal.
American Communications Corp., 306 Broadway, New York, N. Y.
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Arrow Radio Co., 900 W. Jackson Blvd., Chicago, Ill.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Audio Development Co., 2833 13th Ave., S. Minneapolis, Minn.
Ballantine Laboratories, Inc., Boonton, N. J.
Bogen Co., David, 663 Broadway, New York, N. Y. (See page 174.)
Braun, Inc., W. C., 601 W. Randolph St., Chicago, Ill.
Chicago Sound System Co., 2124 S. Michigan Blvd., Chicago, Ill.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Electrical Research Products, Inc., 76 Varick St., New York, N. Y.
Erwood Sound Equipment Co., 223 W. Erie St., Chicago, Ill.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Gabel Mfg. Co., John, 1200 W. Lake St., Chicago, Ill.
Gates Companies, Quincy, Ill.
General Communication Products Co., Lexington Ave. at Vine, Hollywood, Cal.
General Radio Co., 30 State St., Cambridge, Mass.
Gibbs & Co., Thomas B., 900 W. Lake St., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Jack Mfg. Co., Charles, 420 Lehigh St., Allentown, Pa.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Lincrophone Co., 1661 Howard Ave., Utica, N. Y.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Miles Reproducer Co., 812 Broadway, New York, N. Y.
Million Radio & Television Laboratories, 1617 N. Damen St., Chicago, Ill.
National Union Radio Corp., 15 Washington St., Newark, N. J.
National Co., 61 Sherman St., Malden, Mass.
National-Dobro Corp., 400 S. Peoria St., Chicago, Ill.
Newcomb Audio Products Co., 2815 S. Hill St., Los Angeles, Cal.
Norwalk Transformer Corp., South Norwalk, Conn.
Operadio Mfg. Co., St. Charles, Ill.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Rauland Corp., 4245 N. Knox Ave., Chicago, Ill.
Ray Lab, Inc., 211 Railroad Ave., Elmira, N. Y.
RCA Mfg. Co., Camden, N. J.
Regal Amplifier Mfg. Corp., 14 W. 17th St., New York, N. Y.
Rowe Industries, 3120 Monroe St., Toledo, Ohio
Setchell Carlson, Inc., 2233 University Ave., St. Paul, Minn.
Sherron Metallic Corp., 1201 Flushing Ave., Brooklyn, N. Y.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Spokane Radio Co., 611 W. First Ave., Spokane, Wash.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Sundt Engineering Co., 4757 Ravenswood Ave., Chicago, Ill.
Talking Devices Co., 4451 W. Irving Park Rd., Chicago, Ill.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Terminal Radio Corp., 85 Cortlandt St., New York, N. Y. (See page 176.)
Thordarson Electric Mfg. Co., 500 W. Huron St., Chicago, Ill.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.
Triumph Mfg. Co., 4017 W. Lake St., Chicago, Ill.
Vega Co., 155 Columbus Ave., Boston, Mass.
Webster Electric Co., Clark & DeKoven Aves., Racine, Wis.
Western Electric Co.—see Graybar Electric Co.

Analyzers

COLOR ANALYZERS

Bausch & Lomb Optical Co., 635 St. Paul St., Rochester, N. Y.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Electronic Products Co., St. Charles, Ill.
Ess Instrument Co., 30 Irving Pl., New York, N. Y.
Fisher Scientific Co., 711 Forbes St., Pittsburgh, Pa.
Gaertner Scientific Corp., 1201 Wrightwood Ave., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Jarrell-Ash Co., 165 Newbury St., Boston, Mass.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Photobell Corp., 123 Liberty St., New York, N. Y.
Photovolt Corp., 95 Madison Ave., New York, N. Y.
Pho-Tron Instrument Co., 5713 Euclid Ave., Cleveland, Ohio
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Saxl Instrument Co., 42 Weybosset St., Providence, R. I.
Sheldon Electric Corp., 100 Fifth Ave., New York, N. Y.
United Cinephone Corp., Torrington, Conn.
Woermann-Schuchhardt, Inc., 17 W. 17th St., New York, N. Y.

SURFACE ANALYZERS

Brush Development Co., 3311 Perkins Ave., Cleveland, O. (See page 22.)
Physicists Research Co., 343 S. Main St., Ann Arbor, Mich.

Apparatus

GEOPHYSICAL APPARATUS

see also Geophones

American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Engineering Laboratories, Inc., 624 E. Fourth St., Tulsa, Okla.
Geophysical Instrument Co., 1315 Half St., S.E., Washington, D. C.
Heiland Research Corp., Club Bldg., Denver, Colo.
Mico Instrument Co., 10 Arrow St., Cambridge, Mass.
Miller Corp., Wm., 362 W. Colorado St., Pasadena, Cal.

Books

TECHNICAL, ELECTRONICS and RADIO BOOKS

Blakiston Co., 1012 Walnut St., Philadelphia, Pa.
MacMillan Co., 60 Fifth Ave., New York, N. Y.
McGraw-Hill Book Co., 330 W. 42d St., New York, N. Y. (See page 180.)
Maedel Pub. House, 593 E. 38th St., Brooklyn, N. Y. (See page 157.)
Radio Technical Pub. Co., 45 Astor Pl., New York, N. Y.
Rider, John F., 404 Fourth Ave., New York, N. Y.
Ronald Press Co., 15 E. 26th St., New York, N. Y.
Van Nostrand Co., D., 250 Fourth Ave., New York, N. Y.
Wiley & Sons, John, 440 Fourth Ave., New York, N. Y.

Chimes

CHIMES and BELLS

Jack Mfg. Corp., Charles, 420 Lehigh St., Allentown, Pa.
Rangertone, Inc., 73 Winthrop St., Newark, N. J.
RCA Mfg. Co., Camden, N. J.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.

Colorimeters

PHOTO-ELECTRIC COLORIMETERS

American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
Coleman Electric Co., 310 Madison St., Maywood, Ill.
Electronic Products Co., St. Charles, Ill.
Emby Products Co., 1800 W. Pico Blvd., Los Angeles Cal.
Fisher Scientific Co., 711 Forbes St., Pittsburgh, Pa.
Frober-Faybor Co., Chagrin Falls, Ohio
Jarrell-Ash Co., 165 Newbury St., Boston, Mass.
Klett Mfg. Co., 179 E. 87th St., New York, N. Y.
Pfaltz & Bauer, Inc., 350 Fifth Ave., New York, N. Y.
Photovolt Corp., 95 Madison Ave., New York, N. Y.
Pho-Tron Instrument Co., 5713 Euclid Ave., Cleveland, Ohio
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Saxl Instrument Co., 42 Weybosset St., Providence, R. I.
Scientific Glass Apparatus Co., Bloomfield, N. J.
United Cinephone Corp., Torrington, Conn.
Woermann-Schuchhardt, Inc., 17 W. 17th St., New York, N. Y.

Controls

ACIDITY and ALKALINITY CONTROLS

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.

BLEACHING PROCESS CONTROLS

Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.

DOOR OPENER CONTROLS

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.

DRINKING FOUNTAIN CONTROLS

Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.

FURNACE CONTROLS

Brooke Engineering Co., 4517 Wayne Ave., Philadelphia, Pa.
General Electric Co., Schenectady, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
United Cinephone Corp., Torrington, Conn.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

HEAT TREATING CONTROLS

Brown Instrument Co., 4536 Wayne Ave., Philadelphia, Pa.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edingburgh Ave., Los Angeles, Cal.
General Electric Co., Schenectady, N. Y.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

LIGHTING CONTROLS

Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
General Control Co., 243 Broadway, Cambridge, Mass. (See page 171.)
General Electric Co., Schenectady, N. Y.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

MOTOR or GENERATOR CONTROLS

Allis-Chalmers Mfg. Co., Milwaukee, Wisc.
Andrews & Perillo, Inc., 3930 Crescent St., Long Island City, N. Y.
Burlington Instrument Corp., Burlington, Iowa
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
General Control Co., 243 Broadway, Cambridge, Mass. (See page 171.)
General Electric Co., Schenectady, N. Y.
Ohmite Mfg. Co., 4835 W. Flournoy St., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.

PACKAGE WRAPPING CONTROLS

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

PAPER TRIMMING and SLITTING CONTROLS

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
United Cinephone Corp., Torrington, Conn.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

PHOTOGRAPHIC PROCESS CONTROLS

General Control Co., 243 Broadway, Cambridge, Mass.
Industrial Timer Corp., 117 Edison Pl., Newark, N. J.
Intercontinental Marketing Corp., 95 Madison Ave., New York, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
United Cinephone Corp., Torrington, Conn.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

PRINTING REGISTER CONTROLS

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Emby Products Co., 1800 W. Pico Blvd., Los Angeles, Cal.
General Electric Co., Schenectady, N. Y.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
United Cinephone Corp., Torrington, Conn.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

REMOTE CONTROLS

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
American Automatic **Electric Sales Co.,** 1033 W. Van Buren St., Chicago, Ill.
Autocall Co., 1142 Tucker Ave., Shelby, Ohio
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland, Ohio
Bristol Co., Waterbury, Conn.
Brown Instrument Co., 4536 Wayne Ave., Philadelphia, Pa.
Clare & Co., C. P., Lawrence & Lamon Aves., Chicago, Ill.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Electric Indicator Corp., 21 Parker Ave., Stamford, Conn.
Electrimatic Corp., 2100 Indiana Ave., Chicago, Ill.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Elsbert Mfg. Co., 910 W. Lake St., Chicago, Ill.
Foxboro Co, Neponset Ave., Foxboro, Mass.
General Electric Co., Schenectady, N. Y.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill.
Hanlon-Waters, Inc., Tulsa, Okla.
Hart Mfg. Co., 11 Bartholomew Ave., Hartford, Conn.
Hays Corp., 925 Eighth Ave., Michigan City, Ind.
H-B Instrument Co., 2520 N. Broad St., Philadelphia, Pa.
Illinois Engineering Co., Racine Ave. & 20th Pl., Chicago, Ill.
International Filter Co., 325 25th Pl., Chicago, Ill.
Kollsman Instrument Div., Square D Co., 8008 45th Ave., Elmhurst, N. Y.
Kurman Electric Co., 241 Lafayette St., New York, N. Y.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Mason-Neilan Regulator Co., 1190 Adams St., Boston, Mass.
Meissner Mfg. Co., Mt. Carmel, Ill.
Minneapolis-Honeywell Regulator Co., 2712 Fourth Ave., S., Minneapolis, Minn.
Photobell Corp., 116 Nassau St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Republic Flow Meters Co., 2240 Diversey Pkwy., Chicago, Ill.
Scientific Instrument Co., 1441 Walnut St., Berkeley, Cal.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Taylor Instrument Companies, 100 Ames St., Rochester, N. Y.
United Cinephone Corp., Torrington, Conn.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.
Zenith Electric Co., 835 S. Wabash St., Chicago, Ill.

TEMPERATURE CONTROLS

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
Bristol Co., Waterbury, Conn.
Brown Instrument Co., 4536 Wayne Ave., Philadelphia, Pa.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
General Electric Co., Schenectady, N. Y.
Illinois Testing Laboratories, 420 N. La Salle St., Chicago, Ill.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Spencer Thermostat Co., 1404 Forest St., Attleboro, Mass. (See page 111.)
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

THICKNESS CONTROLS

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Magnetic Gauge Co., 60 E. Bartges St., Akron, Ohio
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.

TRAFFIC CONTROLS

American Gas Accumulator Co., Elizabeth, N. J.
Eagle Signal Corp., Moline, Ill.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.

VIBRATION CONTROLS

Andrews & Perillo, Inc., 39-30 Crescent St., Long Island City, N. Y.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.

WEFT STRAIGHTENING CONTROLS

General Electric Co., Schenectady, N. Y.

WELDING CONTROLS

see Timers

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
General Electric Co., Schenectady, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Counters

Andrews & Perillo, Inc., 39-30 Crescent St., Long Island City, N. Y.
Automatic Electric Co., 1033 W. Van Buren St., Chicago, Ill.
Clare Co., C. P., Lawrence & Lamon Aves., Chicago, Ill.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Photobell Corp., 116 Nassau St., New York, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

Detectors

PINHOLE DETECTORS

General Electric Co., Schenectady, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Devices

GRADING DEVICES

Andrews & Perillo, Inc., 39-30 Crescent St., Long Island City, N. Y.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
General Control Co., 243 Broadway, Cambridge, Mass.

KEYING DEVICES

Gray Mfg. Co., 16-30 Arbor St., Hartford, Conn.

MACHINE SAFETY DEVICES

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
General Control Co., 243 Broadway, Cambridge, Mass.
Photobell Corp., 123 Liberty St., New York, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

WEIGHING DEVICES

Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
General Control Co., 243 Broadway, Cambridge, Mass.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.

Diathermy

DIATHERMY APPARATUS

American Systocope Makers, Inc., 1241 Lafayette Ave., Bronx, N. Y.
Battle Creek Equipment Co., 32 N. Washington Ave., Battle Creek, Mich.
Birtcher Corp., 5087 Huntington Drive, N., Los Angeles, Cal.
Burdick Corp., Milton, Wis.

de Forest Laboratories, Lee, 5106 Wilshire Blvd., Los Angeles, Cal.
Ecco High Frequency Corp., 120 W. 20th St., New York, N. Y.
Fischer & Co., H. G., 2323 Wabansia Ave., Chicago, Ill.
Fischer Corp., 673 Ivy St., Glendale, Cal.
General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago, Ill.
Hanovia Chemical & Mfg. Co., N. J. R. R. Ave. & Chestnut St., Newark, N. J.
Herz-Lasker Corp., 17 W. 60th St., New York, N. Y.
High Tension Corp., 118 W. 22d St., New York, N. Y.
Lektra Laboratories, Inc., 30 E. Tenth St., New York, N. Y.
Lepel High Frequency Laboratories, Inc., 39 W. 60th St., New York, N. Y.
Majestic Surgical Instrument Co., 2608 N. Cicero Ave., Chicago, Ill.
McIntosh Electrical Corp., 223 N. California Ave., Chicago, Ill.
Mueller & Co., V., 408 S. Honore St., Chicago, Ill.
Peerless Laboratories, Inc., 115 E. 23d St., New York, N. Y.
Rose Mfg. Co., E. J., 727 E. Gage Ave., Los Angeles, Cal.
Sharp & Smith, Hospital Div., A. S. Aloe Co., 1813 Olive St., St. Louis, Mo.

Electrocardiographs

Beck-Lee Corp., 630 W. Jackson Blvd., Chicago, Ill.
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Electro-Medical Laboratory, Inc., Holliston, Mass.
General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago, Ill.
Herz-Lasker Corp., 17 W. 60th St., New York, N. Y.
Miles Reproducer Co., 812 Broadway, New York, N. Y.
Mueller & Co., V., 408 S. Honore St., Chicago.
Sanborn Co., 39 Osborn St., Cambridge, Mass.

Equipment

DRAFTING ROOM EQUIPMENT

All-Steel-Equip Co., 641 John St., Aurora, Ill.
Alteneder Co., Theo., 1217 Spring Garden St., Philadelphia, Pa.
Arkwright Finishing Co., Turks Head Bldg., Providence, R. I.
Brown & Sharpe Mfg. Co., 235 Promenade St., Providence, R. I.
Bruning Co., Charles, 4700 Montrose Ave., Chicago, Ill.
Calibron Products, Inc., West Orange, N. J.
Cardinell Corp., Montclair, N. J.
Carter's Ink Co., Kendall Square, Boston, Mass.
Coxhead Corp., Ralph C., 333 Sixth Ave., New York, N. Y.
Dietzgen Co., Eugene, 2425 Sheffield Ave., Chicago, Ill.
Dixon Crucible Co., Joseph, Jersey City, N. J. (See page 171.)
Drafto Corp., Pressler Ave., Cochranton, Pa.
Dremel Mfg. Co., 14th & Clark Sts., Racine, Wis.
Eagle Pencil Co., 703 13th St., New York, N. Y.
Emmert Mfg. Co., Waynesboro, Pa.
Eraser Co., 936 University Block, Syracuse, N. Y.
Faber Co., A. W., 41 Dickerson St., Newark, N. J. (See page 29.)
Faber Pencil Co., Eberhard, 37 Greenpoint Ave., Brooklyn, N. Y.
Hamilton Mfg. Co., Two Rivers, Wis.
Higgins Ink Co., 271 Ninth St., Brooklyn, N. Y.
Holliston Mills, Inc., Norwood, Mass.
Hunt & Son Co., C. B., Salem, Ohio
Keuffel & Esser Co., 303 Adams St., Hoboken, N. J. (See page 3.)
Koh-I-Noor Pencil Co., 373 Fourth Ave., New York, N. Y.
Lyon Metal Products, Inc., 1933 Montgomery St., Aurora, Ill.
Ozalid Products Div., General Aniline & Film Corp., 25 Ansco Rd., Johnson City, N. Y.
Paragon-Revolute Corp., 77 South Ave., Rochester, N. Y.
Pease Co., C. F., 2679 W. Irving Park Rd., Chicago, Ill.
Post Co., Frederick, 3650 Avondale Ave., Chicago, Ill.
Shaw Blue Print Machine Co., 11 Campbell St., Newark, N. J.
Speidel & Co., Chas. W., 112 N. 12th St., Philadelphia, Pa.
Stafford, Inc., S. S., 607 Washington St., New York, N. Y.
Starrett Co., L. S., 165 Crescent St., Athol, Mass.
United States Blue Print Paper Co., 207 S. Wabash Ave., Chicago, Ill.
Universal Drafting Machine Co., 1426 W. Third St., Cleveland, Ohio
Weber Co., F., 1220 Buttonwood St., Philadelphia, Pa.
White Dental Mfg. Co., S. S., 10 E. 40th St., New York, N. Y.
Wickes Bros., 512 N. Water St., Saginaw, Mich.
Williams, Brown & Earle, Inc., 918 Chestnut St., Philadelphia, Pa.
Wood-Regan Instrument Co., Nutley, N. J.
Wright, Inc., L. G., 6205 Carnegie Ave., Cleveland, Ohio

Gases

GASES, RARE

Linde Air Products Co., 304 E. 42nd St., New York, N. Y. (See page 175.)

Indicators

POSITION INDICATORS

Automatic Temperature Control Co., 33 E. Logan St., Philadelphia, Pa.
Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland, Ohio
Bendix Marine Products Div., Bendix Aviation Corp., 754 Lexington Ave., Brooklyn, N. Y.
Boston Auto Gage Co., 70 West St., Pittsfield, Mass.
Electric Indicator Corp., 21 Parket Ave., Stamford, Conn.
Electric Speed Indicator Co., 16313 Laverne Ave., Lakewood Ohio
Electric Tachometer Corp., 1354 Spring Garden St., Philadelphia, Pa.
Foxboro Co., Neponset Ave., Foxboro, Mass.
General Electric Co., Schenectady, N. Y.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Pioneer Instrument Div. of Bendix Aviation Corp., Bendix, N. J.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

PRESSURE INDICATORS

Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
Commercial Engineering Laboratories, 4612 Woodward Ave., Detroit, Mich.
General Electric Co., Schenectady, N. Y.
RCA Mfg. Co., Camden, N. J.

SMOKE DENSITY INDICATORS and RECORDERS

Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland, Ohio
Bristol Co., Waterbury, Conn.
Brooke Engineering Co., 4517 Wayne Ave., Philadelphia, Pa.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Ess Instrument Co., 30 Irving Pl., New York, N. Y.
General Electric Co., Schenectady, N. Y.
General Television Corp., 70 Brookline Ave., Boston, Mass.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Lumenite Electric Co., 37 W. Van Buren St., Chicago, Ill.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
McNeil Engineering Equipment Co., T. W., 4057 W. Van Buren St., Chicago, Ill.
Photobell Corp., 123 Liberty St., New York, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Preferred Utilities Mfg. Corp., 31 W. 60th St., New York, N. Y.
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
United Cinephone Corp., Torrington, Conn.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

Intercommunicators

American Television Corp., 130 W. 56th St., New York, N. Y.
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Audio Development Co., 2833 13th Ave., S. Minneapolis, Minn.
Autocrat Radio Co., 3855 N. Hamilton Ave., Chicago, Ill.
Bank's Mfg. Co., 1105 W. Lawrence Ave., Chicago, Ill.
Bell Sound Systems, Inc., 1183 Essex Ave., Columbus, Ohio
Bendix Aviation, Ltd., North Hollywood, Cal.
Bogen Co., David, 663 Broadway, New York, N. Y. (See page 174.)
Bond Products Co., 13139 Hamilton Ave., Detroit, Mich.
Cannon Electric Development Co., 3209 Humboldt St., Los Angeles, Cal.
Communication Equipment & Engrg. Co., 504 N. Parkside Ave., Chicago, Ill.
Connecticut Telephone & Electric Corp., 70 Britannia St., Meriden, Conn. (See page 103.)
De Wald Radio Mfg. Corp., 440 Lafayette St., New York, N. Y.
Electronic Products Co., St. Charles, Ill.
Gibbs & Co., Thomas B., 900 W. Lake St., Chicago, Ill.
Intercall Systems, Inc., Fifth & Norwood, Dayton, Ohio
Karadio Corp., 2233 University Ave., St. Paul, Minn.
Lake Mfg. Co., 2323 Chestnut St., Oakland, Cal.
Million Radio & Television Laboratories, 1617 N. Damen St., Chicago, Ill.
Newcomb Audio Products Co., 2815 S. Hills St., Los Angeles, Cal.
Operadio Mfg. Co., St. Charles, Ill.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Radio Recepter Co., 251 W. 19th St., New York, N. Y.
Rauland Corp., 4245 N. Knox Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Regal Amplifier Mfg. Corp., 14 W. 17th St., New York, N. Y.
Select-O-Phone Co., 1012 Eddy St., Providence, R. I.
Setchell Carlson, Inc., 2233 University Ave., St. Paul, Minn.
Signal Engrg. & Mfg. Co., 154 W. 14th St., New York, N. Y.
Talk-A-Phone Mfg. Co., 1219 W. Van Buren St., Chicago, Ill.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.
Webster Electric Co., Clark & De Koven Aves., Racine, Wis.
Western Sound & Electric Laboratories, Inc., 311 W. Kilbourn Ave., Milwaukee, Wis.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

Irons

ELECTRIC SOLDERING IRONS

Acme Electric Heating Co., 1217 Washington St., Boston, Mass.
Adrola Corp., Adrola Bldg., Port Jefferson, N. Y.
All Rite Co., Morgan & First Sts., Rushville, Ind.
American Electrical Heater Co., 6110 Cass Ave., Detroit, Mich.
Brach Mfg. Corp., L. S., 55 Dickerson St., Newark, N. J.
Cole Radio Works, 86 Westville Ave., Caldwell, N. J.
Dominion Electrical Mfg. Co., 22 Elm St., Mansfield, Ohio
Drake Electric Works, 3656 Lincoln Ave., Chicago, Ill.
Dual Remote Control Co., 31776 W. Warren St., Wayne, Mich.
Eagle Electric Mfg. Co., 59 Hall St., Brooklyn, N. Y.
Electric Soldering Iron Co., 205 W. Elm St., Deep River, Conn.
General Electric Co., Schenectady, N. Y.
Hexacon Electric Appliance Corp., 163 W. Clay Ave., Roselle Park, N. J.
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
Insuline Corp. of America, 30-30 Northern Blvd., Long Island City, N. Y.
Jackson Electro Corp., 625 Broadway, New York, N. Y.
Kay Co., J. H., 121 Second St., San Francisco, Cal.
Landers, Frary & Clark, 47 Center St., New Britain, Conn.
Lenk Mfg. Co., Newton Lower Falls, Mass.

Northern Electric Co., 5224 N. Kedzie Ave., Chicago, Ill.
Ohio Art Co., Bryan, Ohio
Samson-United Corp., 8 Jones St., Rochester, N. Y.
Stanley Tools, Div. of Stanley Works, New Britain, Conn.
Sta-Warm Electric Co., 565 N. Chestnut St., Ravenna, Ohio
Suttle Equipment Co., Lawrenceville, Ill.
Trent Co., Harold E., 55th St. & Wyalusing Ave., Philadelphia, Pa.
Vasco Electrical Mfg. Co., 4116 Avalon Blvd., Los Angeles, Cal.
Vulcan Electric Co., 600 Broad St., Lynn, Mass.
Ward Mfg. Co., 1813 Winona Ave., Chicago, Ill.
Wellmade Electric Mfg. Co., Railroad Sq. & Church St., Torrington, Conn.

Meters

LIGHT METERS

American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Applied Research Laboratories, 1208 San Julian St., Los Angeles, Cal.
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Central Scientific Co., 1700 Irving Park Blvd., Chicago, Ill.
De Jur-Amsco Corp., 6 Bridge St., Shelton, Conn.
Gaertner Scientific Corp., 1201 Wrightwood Ave., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Jarrell-Ash Co., 165 Newbury St., Boston, Mass.
Leeds & Northrup Co., 4970 Stenton Ave., Philadelphia, Pa.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Parr Instrument Co., 222 52d St., Moline, Ill.
Pfaltz & Bauer, Inc., 350 Fifth Ave., New York, N. Y.
Phipps & Bird, Inc., Richmond, Va.
Photovolt Corp., 95 Madison Ave., New York, N. Y.
Pho-Tron Instrument Co., 5713 Euclid Ave., Cleveland, Ohio
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
United Cinephone Corp., Torrington, Conn.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
Zeiss, Inc., Carl, 485 Fifth Ave., New York, N. Y.

TIME METERS

American Time Products, Inc., 580 Fifth Ave., New York, N. Y.
Cramer Co., R. W. Centerbrook, Conn.
Electric Tachometer Corp., 1354 Spring Garden St., Philadelphia, Pa.
Esterline-Angus Co., (Speedway City) Indianapolis, Ind.
General Electric Co., Schenectady, N. Y.
Jaeger Watch Co., 304 E. 45th St., New York, N. Y.
National Instrument Co., 44 School St., Boston, Mass.
Paragon Electric Co., 37 W. Van Buren St., Chicago, Ill.
Rawson Electric Instrument Co., 102 Potter St., Cambridge, Mass.
Thompson Clock Co., H. C., 38 Federal St., Bristol, Conn.
Warren Telechron Co., Homer Ave., Ashland, Mass.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Machines

COIL WINDING MACHINES

Armature Coil Equipment, Inc., 2605 Vega Ave., Cleveland, Ohio
Chapman Electrical Works, P. E., 1820 Chouteau Ave., St. Louis, Mo.
Conran, Frederick M., 107 Colden St., Newark, N. J.
Eisler Engrg. Co., 770 S. 13th St., Newark, N. J.
Electric Service Supplies Co., 17th & Cambria Sts., Philadelphia, Pa.
General Electric Specialty Co., 184-01 Hillside Ave., Hollis, N. Y.
Guthman & Co., Edwin I., 400 S. Peoria St., Chicago, Ill.
Ideal Commutator Dresser Co., 1631 Park Ave., Sycamore, Ill.
Potter & Rayfield, Inc., Hemphill Ave., Atlanta, Ga.
Seifert, Inc., E. R., 315 E. Washington St., Syracuse, N. Y.
Universal Winding Co., 1655 Elmwood Ave., Providence, R. I.
Viking Tool & Machine Co., Mill & Main Sts., Belleville, N. J.

TUBE MANUFACTURING MACHINES

Eisler Engineering Co., 751 S. 13th St., Newark, N. J.
Kahle Engineering Corp., 1307 Seventh St., North Bergen, N. J.

Micrometers

ELECTRONIC MICROMETERS

Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Televiso Products, Inc., 2400 N. Sheffield Ave., Chicago, Ill.

Microscopes

ELECTRON MICROSCOPES

RCA Mfg. Co., Camden, N. J.

Monitors

BROADCASTING MONITORS

Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Du Mont Laboratories, Inc., Allen B., 2 Main Ave., Passaic, N. J.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
RCA Mfg. Co., Camden, N. J.

Phonographs

ELECTRIC PHONOGRAPHS and RECORD PLAYERS

Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Ansley Radio Corp., 21-10 49th Ave., Long Island City, N. Y.
Autocrat Radio Co., 3855 N. Hamilton Ave., Chicago, Ill.
Calvert Motors Associates, Ltd., 1028 Linden Ave., Baltimore, Md.
Chicago Sound System Co., 2124 S. Michigan Blvd., Chicago, Ill.
Cinematone Corp., 1107 N. Highland Ave., Hollywood, Cal.
Columbia Recording Corp., 1473 Barnum Ave., Bridgeport, Conn.
Continental Radio & Television Corp., 3800 Cortlandt St., Chicago, Ill.
Decca Records, Inc., 50 W. 57th St., New York, N. Y.
D-X Radio Products Co., 1575 Milwaukee Ave., Chicago, Ill.
Dynavox Corp., 55 E. 11th St., New York, N. Y.
Electro Acoustic Co., 2131 Bueter Rd., Fort Wayne, Ind.
Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York, N. Y.
Espey Mfg. Co., 305 E. 63d St., New York, N. Y.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Gabel Mfg. Co., John, 1200 W. Lake St., Chicago, Ill.
Garrard Sales Corp., 296 Broadway, New York, N. Y.
Gibbs & Co., Thomas B., 900 W. Lake St., Chicago, Ill.
Harris Mfg. Co., 2422 W. Seventh St., Los Angeles, Cal.
Herbert Corp., 600 N. Albany, Chicago, Ill.
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
Majestic Radio & Television Corp., 2600 W. 50th St., Chicago, Ill.
Marconiphone, Inc., 679 Madison Ave., New York, N. Y.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Miller Co., J. W., 5917 S. Main St., Los Angeles, Cal.
Mills Novelty Co., 4100 Fullerton Ave., Chicago, Ill.
Music Master Mfg. Co., 508 S. Dearborn St., Chicago, Ill.
Operadio Mfg. Co., St. Charles, Ill.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Presto Recording Corp., 242 W. 55th St., New York, N. Y.
Radiad Service, 720 W. Schubert Ave., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Regal Amplifier Mfg. Corp., 14 W. 17th St., New York, N. Y.
Rock-Ola Mfg. Corp., 867 N. Kedzie Ave., Chicago, Ill.
Seeburg Corp., J. P., 1510 N. Dayton St., Chicago, Ill.
Sentinel Radio Corp., 2020 Ridge Ave., Evanston, Ill.
Sonora Radio & Phonograph Corp., 2626 W. Washington St., Chicago, Ill.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Sparks-Withington Co., E. Ganson Ave., Jackson, Mich.
Speak-O-Phone Recording & Equipment Co., 23 W. 60th St., New York, N. Y.
Stangard Products Co., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Talk-A-Phone Mfg. Co., 1219 W. Van Buren St., Chicago, Ill.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.
Warner Co., J. J., 1244 Larkin St., San Francisco, Cal.
Waters-Conley Co., 501 First St., N.W., Rochester, Minn.
Wurlitzer Mfg. Co., Rudolph, North Tonawanda, N. Y.

Pumps

VACUUM PUMPS

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Beach-Russ Co., 50 Church St., New York, N. Y.
Buffalo Foundry & Machine Co., 1635 Fillmore Ave., Buffalo, N. Y.
Columbus Steam Pump Works Co., Columbus, Ohio
Eisler Engrg. Co., 770 S. 13th St., Newark, N. J.
General Electric Co., Schenectady, N. Y.
Gerotor May Co., Baltimore, Md.
Ingersoll-Rand Co., 11 Broadway, New York, N. Y.
International Machine Works, North Bergen, N. J.
Kahle Engineering Corp., 1307 Seventh St., North Bergen, N. J.
Kinney Mfg. Co., 3529 Washington St., Boston, Mass.
Kraissl Co., 303 Williams Ave., Hackensack, N. J.
Leiman Bros., 156 Christie St., Newark, N. J.
New Jersey Machine Corp., 1800 Willow Ave., Hoboken, N. J.
Nichols & Sons, W. H., 303 Woerd Ave., Waltham, Mass.
Pennsylvania Pump & Compressor Co., Easton, Pa.
Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio
Stokes Machine Co., F. J., 5850 Tabor Rd., Olney P. O., Philadelphia, Pa.
Sullivan Machinery Co., 929 Woodland Ave., Michigan City, Ind.
Worthington Pump & Machinery Corp., Harrison, N. J.
Yeomans Bros. Co., 1459 N. Dayton St., Chicago, Ill.
Zenith Products Co., West Newton, Mass.

Receivers

AIRCRAFT RECEIVERS

Abbott Instrument, Inc., 8 W. 18th St., New York, N. Y.
Aircraft Radio Corp., Boonton, N. J.
Air Radio & Instrument Co., 5214 W. 63d St., Chicago, Ill.
Bassett Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Bendix Aviation, Ltd., North Hollywood, Cal.
Bendix Radio, Div. of Bendix Aviation Corp., Baltimore, Md.

Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Communications Co., 2700 Ponce de Leon Blvd., Coral Gables, Fla.
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Electronic Specialty Co., 3456 Glendale Blvd., Los Angles, Cal.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Jefferson-Travis Radio Mfg. Corp., 380 Second Ave., New York, N. Y.
Karadio Corp., 2233 University Ave., St. Paul, Minn.
Lear-Avia, Inc., 1718 Broadway, Piqua, Ohio.
Midwest Radio Corp., 909 Broadway, Cincinnati, Ohio
National Co., 61 Sherman St., Malden, Mass.
Radio Frequency Laboratories, Inc., Boonton, N. J.
Radio Navigational Instrument Corp., 500 Fifth Ave., New York, N. Y.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Setchell Carlson, Inc., 2233 University Ave., St. Paul, Minn.
Smith Co., Maxwell, 1027 N. Highland Ave., Kearny, N. J.
Sparks-Withington Co., North St., Jackson, Mich.
Taylor Airphone Products, Inc., Municipal Airport, Long Beach, Cal.
Western Electric Co.—see Graybar Electric, Co.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wilcox Electric Co., 3947 State Line, Kansas City, Mo.

AMATEUR RECEIVERS

Abbott Instrument, Inc., 8 W. 18th St., New York, N. Y. **(See page 153.)**
Echophone Radio Co., 201 E. 26th St., Chicago, Ill.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Meissner Mfg. Co., Mt. Carmel, Ill.
Millen Mfg. Co., James, 150 Exchange St., Malden, Mass.
National Co., 61 Sherman St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Pierson-De Lane, Inc., 2345 W. Washington Blvd., Los Angeles, Cal.
Pilot Radio Corp., 37–06 36th St., Long Island City, N. Y.
Radio Mfg. Engineers, Inc., 111 Harrison St., Peoria, Ill.
Radio Transceiver Laboratories, 120–03 Jamaica Ave., Richmond Hill, N. Y.
RCA Mfg. Co., Camden, N. J.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Tefft Radio Co., Plymouth, Mich.
Wells-Gardner & Co., 2701 N. Kildare Ave., Chicago, Ill.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

AUTO RECEIVERS

Automatic Radio & Television Co., 122 Brookline Ave., Boston, Mass.
Calvert Motors Associates, Ltd., 1028 Linden Ave., Baltimore, Md.
Cavalier Motors Associates, Ltd., 1028 Linden Ave., Baltimore, Md.
Colonial Radio Corp., 254 Rano St., Buffalo, N. Y.
Crosley Corp., 1329 Arlington St., Cincinnati, Ohio
Delco Radio Div., General Motors Service, Kokomo, Ind.
Detrola Corp., 1501 Beard Ave., Detroit, Mich.
Fada Radio & Electric Co., 30–20 Thomson Ave., Long Island City, N. Y.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Karadio Corp., 2233 University Ave., St. Paul, Minn.
Noblitt-Sparks Industries, E. 17th St., Columbus, Ind.
Radio Products Corp., 3800 W. Cortland St., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Sonora Radio & Phonograph Corp., 2926 W. Washington St., Chicago, Ill.
Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago, Ill.
Trav-ler Karenola Tele Corp., 1036 W. Van Buren St., Chicago, Ill.
Trebor Radio Co., Pasadena, Cal.
Warwick Mfg. Co., 1700 W. Washington Blvd., Chicago, Ill.
Wells-Gardner & Co., 2701 N. Kildare Ave., Chicago, Ill.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

FACSIMILE RECEIVERS

Finch Telecommunications, Inc., Passaic, N. J.
RCA Mfg. Co., Camden, N. J.

FREQUENCY MODULATION RECEIVERS

Air King Radio & Television, 1523 63d St., Brooklyn, N. Y.
Ansley Radio Corp., 21–10 49th Ave., Long Island City, N. Y.
Autocrat Radio Co., 3855 N. Hamilton Ave., Chicago, Ill.
Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York, N. Y.
Espey Mfg. Co., 305 E. 63d St., New York, N. Y.
Fada Radio & Electric Co., 30–20 Thomson Ave., Long Island City, N. Y.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Freed Radio Corp., 39 W. 19 St., New York, N. Y.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill.
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
Meissner Mfg. Co., Mt. Carmel, Ill.
National Co., 61 Sherman St., Malden, Mass.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Philharmonic Radio Corp., 216 William St., New York, N. Y.
Pierson-De Lane, Inc., 2345 W. Washington Blvd., Los Angeles, Cal.
Pilot Radio Corp., 37–06 36th St., Long Island City, N. Y.
Radio Engineering Laboratories, Inc., 35–54 36th St., Long Island City, N. Y.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
Scott Labs Inc., E. H., 4450 Ravenswood Ave., Chicago, Ill.
Sentinel Radio Corp., 2020 Ridge Ave., Evanston, Ill.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Stewart-Warner Corp., 1826 Diversey Pkwy, Chicago, Ill.
Stromberg-Carlson Telephone Mfg., 100 Carlson Rd., Rochester, N. Y.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

HOME RECEIVERS

Air King Radio & Television, 1523 63d St., Brooklyn, N. Y.
Andrea Radio Corp., 4820 48th Ave., Woodside, N. Y.
Ansley Radio Corp., 21–10 49th Ave., Long Island City, N. Y.
Autocrat Radio Co., 3855 N. Hamilton Ave., Chicago, Ill.
Automatic Radio & Television Co., 122 Brookline Ave., Boston, Mass.
Bell Radio & Television, 125 E. 46th St., New York, N. Y.
Belmont Radio Corp., 5921 W. Dickens Ave., Chicago, Ill.
Brunswick Radio Div., Mersman Bros. Corp., 206 Lexington Ave., New York, N. Y.
Calvert Motors Associates, Ltd., 1028 Linden Ave., Baltimore, Md.
Colonial Radio Corp., 254 Rano St., Buffalo, N. Y.
Continental Radio & Television Corp., 3800 Cortlandt St., Chicago, Ill.
Crosley Corp., 1329 Arlington St., Cincinnati, Ohio
Delco Radio Div., General Motors Service, Kokomo, Ind.
De Wald Radio Mfg. Corp., 440 Lafayette St., New York, N. Y.
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Electrical Research Lab., Inc., 2020 Ridge Ave., Evanston, Ill.
Electromatic Distributors, Inc., 88 University Pl., New York, N. Y.
Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York, N. Y.
Espey Mfg. Co., 305 E. 63d St., New York, N. Y.
Fada Radio & Electric Co., 30–20 Thomson Ave., Long Island City, N. Y.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
Freed Radio Corp., 39 W. 19th St., New York, N. Y.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Garod Radio Corp., 70 Washington St., Brooklyn, N. Y.
General Electric Co., Appliance and Merchandise Dept., Bridgeport, Conn.
General Television & Radio Corp., 1240 N. Homan Ave., Chicago, Ill.
Gilfillan Bros., Inc., 1815 Venice Blvd., Los Angeles, Cal.
Grebe Mfg. Co., 70 Washington St., Brooklyn, N. Y.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Kadette Radio Corp., 310 First National Bldg., Ann Arbor, Mich.
Laurehk Radio Mfg. Co., 3918 Monroe Ave., Wayne, Mich.
L'Tatro Mfg. Co., 417 W. Water St., Decorah, Iowa
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
Majestic Radio & Television Corp., 2600 W. 50th St., Chicago, Ill.
Marconiphone, Inc., 679 Madison Ave., New York, N. Y.
Meissner Mfg. Co., Mt. Carmel, Ill.
Midwest Radio Corp., 909 Broadway, Cincinnati, Ohio
Mitchell Mfg. Co., 1550 N. Dayton St., Chicago, Ill.
Noblitt-Sparks Industries, E. 17th St., Columbus, Ind.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Packard Bell Co., 1320 S. Grand Ave., Los Angeles, Cal.
Paramount Radio Corp., 967 22d St., Oakland, Cal.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Philharmonic Radio Corp., 216 William St., New York, N. Y.
Philmore Mfg. Co., 113 University Pl., New York, N. Y.
Pilot Radio Corp., 37–06 36th St., Long Island City, N. Y.
Radio Products Corp., 3800 W. Cortland St., Chicago, Ill.
RCA Mfg. Co., Camden, N. J.
Recordovox Inc., 80 Cortlandt St., New York, N. Y.
Remler Co., 2101 Bryant St., San Francisco, Cal.
Scott Labs Inc., E. H., 4450 Ravenswood Ave., Chicago, Ill.
Sentinel Radio Corp., 2020 Ridge Ave., Evanston, Ill.
Setchell Carlson, Inc., 2233 University Ave., St. Paul, Minn.
Sillcox Radio & Television Co., 60 Wall Tower, New York, N. Y.
Sonora Radio & Phonograph Corp., 2926 W. Washington St., Chicago, Ill.
Sparks-Withington Co., Jackson, Mich.
Stewart-Warner Corp., 1826 Diversey Pkwy, Chicago, Ill.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Trav-ler Karenola Tele Corp., 1036 W. Van Buren St., Chicago, Ill.
Trebor Radio Co., Pasadena, Cal.
Walsh, Lincoln, 34 DeHart Pl., Elizabeth, N. J.
Warwick Mfg. Co., 1700 W. Washington Blvd., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.
Zepher Radio Co., 13139 Hamilton Ave., Detroit, Mich.

MARINE RECEIVERS

American Communications Corp., 306 Broadway, New York, N. Y.
Bassett, Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Bendix Aviation, Ltd., North Hollywood, Cal.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Communications Co., 828 Valencia Ave., Coral Gables, Fla.
Espey Mfg. Co., 305 E. 63d St., New York, N. Y.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill.
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass.
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
International Telephone Development Co., 137 Varick St., New York, N. Y.
Jefferson, Inc., Ray, 182 Millburn Ave., Baldwin, N. Y.
Jefferson-Travis Radio Mfg. Corp., 380 Second Ave., New York, N. Y.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Karadio Corp., 2233 University Ave., St. Paul, Minn.
Karns-White Corp., 1775 Broadway, New York, N. Y.
National Co., 61 Sherman St., Malden, Mass.
Radiomarine Corp. of America, 75 Varick St., New York, N. Y.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Spokane Radio Co., 611 First Ave., Spokane, Wash.
Televiso Prods. Inc., 2400 N. Sheffield Ave., Chicago, Ill.
Western Electric Co.—see Graybar Electric Co.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

POLICE RECEIVERS

Abbott Instrument, Inc., 8 W. 18th St., New York, N. Y.
American Communications Corp., 306 Broadway, New York, N. Y.
Bassett, Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Bendix Aviation, Ltd., North Hollywood, Cal.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Communications Co., 2700 Ponce de Leon Blvd., Coral Gables, Fla.
Detrola Corp., 1501 Beard Ave., Detroit, Mich.
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill. **(See page 142.)**
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hammarlund Mfg. Co., 424 W. 33d St., New York, N. Y.
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass.
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
Jefferson-Travis Radio Mfg. Corp., 380 Second Ave., New York, N. Y.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Karadio Corp., 2233 University Ave., St. Paul, Minn.
Link, Fred M., 125 W. 17th St., New York, N. Y.
National Co., 61 Sherman St., Malden, Mass.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Pierson-De Lane, Inc., 2345 W. Washington Blvd., Los Angeles, Cal.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
RCA Mfg. Co., Camden, N. J.
Setchell Carlson, Inc., 2233 University Ave., St. Paul, Minn.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Spokane Radio Co., 611 First Ave., Spokane, Wash.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Western Electric Co.—see Graybar Electric Co.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

RADIO COMPASS RECEIVERS

Aeronautical Radio Co., Roosevelt Field, Mineola, N. Y.
Airguide, Inc., Islip, N. Y.
Air Radio & Instrument Co., 5214 W. 63d St., Chicago, Ill.
Aircraft Accessories Corp., 166 W. Olive Ave., Burbank, Cal.
Airplane & Marine Instruments, Inc., Clearfield, Pa.
American Aircraft Radio Div., Searle Aero Industries, Inc., 226 N. Hawthorne Blvd., Hawthorne, Cal.
Bendix Radio Div. of Bendix Aviation Corp., Baltimore, Md.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Fisher Research Laboratory, 1961 University Ave., Palo Alto, Cal.
Frazar & Co., 301 Clay St., San Francisco, Cal.
Gray Radio Co., 730 Okeeshobee Rd., West Palm Beach, Fla.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill.
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass.
Jefferson, Inc., Ray, 182 Millburn Ave., Baldwin, N. Y.
Jefferson-Travis Radio Mfg. Corp., 380 Second Ave., New York, N. Y.
Lear-Avia, Inc., 1718 Broadway, Piqua, Ohio
Panoramic Radio Corp., 242 W. 55 St., New York, N. Y.
Radiomarine Corp. of America, 75 Varick St., New York, N. Y.
Radio Navigational Instrument Corp., 500 Fifth Ave., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Siebenthaler Div., Aircraft Accessories Corp., Kansas City, Mo.
Stratosearch, Inc., Westchester Airport, Armonk, N. Y.
Western Electric Co.—See Graybar Electric Co.,
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Recorders

RECORDERS and CUTTING HEADS

Acoustic Consultants, Inc., 1270 Sixth Ave., New York, N. Y.
Allied Recording Products Co., 21-09 43d Ave., Long Island City, N. Y.
Arrow Radio Co., 900 W. Jackson Blvd., Chicago, Ill.
Audio-Tone Oscillator Co., 60 Walter St., Bridgeport, Conn.
Bateman Sound Systems, 680 Johnston St., Akron, Ohio
Bell Sound Systems, Inc., 1183 Essex Ave., Columbus, Ohio
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
De Vry, Herman A., 1111 W. Center St., Chicago, Ill.
Electrical Industries Mfg. Co., Red Bank, N. J.
Fairchild Aviation Corp., 88-06 Van Wyck Blvd., Jamaica, N. Y.
Federal Recorder Co., Elkhart, Ind.
Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.
McDonald Recording & Engrg. Service, 415 N. Harper Ave., Los Angeles, Cal.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Meissner Mfg. Co., Mt. Carmel, Ill.
Mellaphone Corp., 65 Atlantic Ave., Rochester, N. Y.
Memovox, Inc., 405 N. Maple Drive, Beverly Hills, Cal.
Miles Reproducer Co., 812 Broadway, New York, N. Y.
Music Master Mfg. Co., 508 S. Dearborn St., Chicago, Ill.
Pacific Sound Equipment Co., 7373 Melrose Ave., Hollywood, Cal.
Presto Recording Corp., 242 W. 55th St., New York, N. Y.
Proctor Co., B. A., 2 W. 45th St., New York, N. Y.
Radiotone, Inc., 7356 Melrose Ave., Los Angeles, Cal.
RCA Mfg. Co., Camden, N. J.
Rek-O-Kut Corp., 173 Lafayette St., New York, N. Y.
Rieber, Inc., Frank, 11916 W. Pico Blvd., Los Angeles, Cal.
Robinson Recording Laboratories, 35 S. Ninth St., Philadelphia, Pa.
Scully Machine Co., 62 Walter St., Bridgeport, Conn.
Seeburg Corp., J. P., 1510 N. Dayton St., Chicago, Ill.
Sound Apparatus Co., 150 W. 46th St., New York, N. Y.
Speak-O-Phone Recording & Equipment Co., 23 W. 60th St., New York, N. Y.
Talk-A-Phone Mfg. Co., 1219 W. Van Buren St., Chicago, Ill.
Talking Devices Co., 4451 W. Irving Park Rd., Chicago, Ill.
United Sound Engrg. Co., 6642 Santa Monica Blvd., Hollywood, Cal.
Warner Co., J. J., 1244 Larkin St., San Francisco, Cal.
Western Sound & Electric Laboratories, Inc., 311 W. Kilbourn Ave., Milwaukee, Wis.
Wilcox-Gay Corp., Charlotte, Mich.
Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.

NOISE RECORDERS

Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio
General Radio Co., 30 State St., Cambridge, Mass.
Sound Apparatus Co., 150 W. 45th St., New York, N. Y.

Records

PHONOGRAPH RECORDS

Columbia Recording Corp., 1475 Barnum Ave., Bridgeport, Conn.
Decca Records, Inc., 50 W. 57th St., New York, N. Y.
Jack Mfg. Corp., Charles, 420 Lehigh St., Allentown, Pa.
Musicraft Records, Inc., 242 W. 55th St., New York, N. Y.
Rangertone, Inc., 201 Verona Ave., Newark, N. J.
RCA Mfg. Co., Camden, N. J.
Sundt Engineering Co., 4757 Ravenswood Ave., Chicago, Ill.
Warner Co., J. J., 1244 Larkin St., San Francisco, Cal.

Relays

CAPACITY OPERATED RELAYS

General Electric Co., Schenectady, N. Y.
Luxtrol Co., 54 W. 21st St., New York, N. Y.

PHOTOELECTRIC RELAYS

Advance Electric Co., 1260 W. Second St., Los Angeles, Cal.
Allied Control Co., 227 Fulton St., New York, N. Y.
American Instrument Co., 8010 Georgia Ave., Silver Spring, Md.
Clare & Co., C. P., Lawrence & Lamon Aves., Chicago, Ill.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Dickson Co., 7420 Woodlawn Ave., Chicago, Ill.
Eby, Inc., Hugh H., 4700 Stenton Ave., Philadelphia, Pa.
Electronic Laboratory, 306 S. Edinburgh Ave., Los Angeles, Cal.
Electronic Products Co., 605 Prairie St., St. Charles, Ill.
Ess Instrument Co., 31 Irving Pl., New York, N. Y.
General Electric Co., Schenectady, N. Y.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Leach Relay Co., 5915 Avalon Blvd., Los Angeles, Cal.
Lipman Eng. Co., 415 Van Braam St., Pittsburgh, Pa.
Lumenite Electric Co., 37 W. Van Buren St., Chicago, Ill.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Philharmonic Radio Corp., 216 William St., New York, N. Y.
Photobell Corp., 116 Nassau St., New York, N. Y.

Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Rehtron Corp., 2159 Magnolia Ave., Chicago, Ill.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
United Cinephone Corp., Torrington, Conn.
Ward Leonard Electric Co., 31 South St., Mount Vernon, N. Y.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.
Warner Products Corp., 1019 W. Lake St., Chicago, Ill.

PHOTOTUBE RELAYS

Andrews & Perillo, Inc., 39-30 Crescent St., Long Island City, N. Y.
Brown Instrument Co., 4536 Wayne Ave., Philadelphia, Pa.
Electronic Control Corp., 626 Harper Ave., Detroit, Mich.
Electronic Products Co., St. Charles, Ill.
General Control Co., 243 Broadway, Cambridge, Mass.
General Electric Co., Schenectady, N. Y.
G-M Laboratories, Inc., 4313 N. Knox Ave., Chicago, Ill.
Leach Relay Co., 5915 Avalon Blvd., Los Angeles, Cal.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
United Cinephone Corp., Torrington, Conn.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

Schools

RADIO and TELEVISION TRAINING SCHOOLS

American School, Drexel Ave., at 58th St., Chicago, Ill.
Capitol Radio Engineering Institute, Inc., 3224 16th St., N. W., Washington, D. C.
Dodge Telegraph & Radio Institute, 405 Monroe St., Valparaiso, Ind.
Massachusetts Radio School, 18 Boylston St., Boston, Mass.
Midland Radio & Television Schools, Inc., Power & Light Bldg., Kansas City, Mo.
National Schools, 4000 Figueroa St., Los Angeles, Cal.
National Radio Institute, 16th & U Sts., Washington, D. C.
Pacific Radio Institute, 1355 Market St., San Francisco, Cal.
Radio Institute of Cal., 1117 Venice Blvd., Los Angeles, Cal.
Radio Television Institute, Inc., 480 Lexington Ave., New York, N. Y.
Radio Training Association of America, 1559 Devon Ave., Chicago, Ill.
RCA Institute, Inc., 75 Varick St., New York, N. Y.
Sprayberry Academy of Radio, 2548 University Pl., N. W., Washington, D. C.

Sound

COMPLETE SOUND SYSTEMS

Altec Lansing Corp., 6900 McKinley Ave., Los Angeles, Cal.
American Communications Corp., 306 Broadway, New York, N. Y.
Amplifier Co. of America, 17 W. 20th St., New York, N. Y.
Arrow Radio Co., 900 W. Jackson Blvd., Chicago, Ill.
Atlas Sound Corp., 1442 39th St., Brooklyn, N. Y.
Audiograph Sound Systems, 1313 W. Randolph St., Chicago, Ill.
Bell Sound Systems, Inc., 1183 Essex Ave., Columbus, Ohio
Bogen Co., David, 663 Broadway, New York, N. Y.
Bond Products Co., 13139 Hamilton Ave., Detroit, Mich.
Braun, Inc., W. C., 601 W. Randolph St., Chicago, Ill.
Chicago Sound System Co., 2124 S. Michigan Blvd., Chicago, Ill.
Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati, Ohio
De Vry Corp., 1111 Armitage Ave., Chicago, Ill.
Dilks Acoustic Co., S. Norwalk, Conn. (See page 155.)
Electronic Laboratories, Inc., 122 W. New York St., Indianapolis, Ind.
Empire Radio Mfg. Co., 114 E. 47th St., New York, N. Y.
Gates Companies, Quincy, Ill.
General Communication Products Co., Lexington Ave. at Vine, Hollywood, Cal.
Gibbs & Co., 900 W. Lake St., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Jack Mfg. Corp., Charles, 420 Lehigh St., Allentown, Pa.
Laurehk Radio Mfg. Co., 3918 Monroe Ave., Wayne, Mich.
Lincrophone Co., 1661 Howard Ave., Utica, N. Y.
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
Meck Industries, John, 1313 W. Randolph St., Chicago, Ill.
Million Radio & Television Labs., 1617 N. Damen Ave., Chicago, Ill.
Morlen Electric Co., 60 W. 15th St., New York, N. Y.
Newcomb Audio Products Co., 2815 S. Hill St., Los Angeles, Cal.
Operadio Mfg. Co., 13th & Indiana Sts., St. Charles, Ill.
Pacent Engineering Corp., 79 Madison Ave., New York, N. Y.
Philco Radio & Television Corp., Tioga & C Sts., Philadelphia, Pa.
Radiad Service, 720 W. Schubert Ave., Chicago, Ill.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
Rauland Corp., 4245 N. Knox Ave., Chicago, Ill.
Ray-Lab, Inc., 211 Railroad Ave., Elmira, N. Y.
RCA Mfg. Co., Camden, N. J.
Regal Amplifier Mfg. Corp., 14 W. 17 St., New York, N. Y.
Setchell Carlson, Inc., 2233 University Ave., St. Paul, Minn.
Simpson Mfg. Co., Mark, 188 W. Fourth St., New York, N. Y.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Sound Scriber Corp., 82 Audubon St., New Haven, Conn. (See page 162.)
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Sundt Engineering Co., 4757 Ravenswood Ave., Chicago, Ill.
Transformer Corp. of America, 69 Wooster St., New York, N. Y.
Triumph Mfg. Co., 4016 W. Lake St., Chicago, Ill.
United Sound Engrg. Co., 6642 Santa Monica Blvd., Hollywood, Cal.
Webster Electric Co., Clark & DeKoven Aves., Racine, Wis.
Western Electric Co.—see Graybar Electric Co.
Western Sound & Electric Laboratories, Inc., 311 W. Kilbourn Ave., Milwaukee, Wis.

Stroboscopes

Boulin Instrument Corp., 65 Madison Ave., New York, N. Y.
Commercial Engineering Laboratories, 4612 Woodward Ave., Detroit, Mich.
General Electric Co., Schenectady, N. Y.
General Radio Co., 30 State St., Cambridge, Mass.
L. A. B. Corp., Summit, N. J.
Pioneer Instrument Div. of Bendix Aviation, Bendix, N. J.
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago, Ill.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Zeiss, Inc., Carl, 485 Fifth Ave., New York, N. Y.

Testers

AUTOMOTIVE EQUIPMENT TESTERS

Bacharach Industrial Instrument Co., 7000 Bennett St., Pittsburgh, Pa.
Bear Mfg. Co., Rock Island, Ill.
Burton-Rogers Co., 857 Boylston St., Boston, Mass. (Sole Distributors for Hoyt Electrical Instrument Works, Boston, Mass.)
Cambridge Instrument Co., Grand Central Terminal, New York, N. Y.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Engelhard, Inc., Charles, 90 Chestnut St., Newark, N. J.
Hays Corp., 925 Eighth Ave., Michigan City, Ind.
Hickok Electrical Instrument Co., 10514 Dupont Ave., Cleveland, Ohio
Hoyt Electrical Instrument Works—see Burton Rogers Co.
Potter Co., 1950 Sheridan Rd., North Chicago, Ill.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

ELECTRICAL METER TESTERS

American Automatic Electric Sales Co., 1033 W. Van Buren St., Chicago, Ill.
Associated Research, Inc., 431 S. Dearborn St., Chicago, Ill.
Biddle Co., James G., 1213 Arch St., Philadelphia, Pa.
Clough-Brengle Co., 5501 Broadway, Chicago, Ill.
Communication Measurements Laboratory, 136 Liberty St., New York, N. Y.
Deutschmann Corp., Tobe, Canton, Mass.
Eastern Specialty Co., 3619 N. Eighth St., Philadelphia, Pa.
Electrical Facilities, Inc., 4224 Holden St., Oakland, Pa.
Ferris Instrument Corp., Boonton, N. J.
General Electric Co., Schenectady, N. Y.
Industrial Instruments, Inc., 156 Culver Ave., Jersey City, N. J.
McFarlin Co., 29 W. Marion Ave., Youngstown, Ohio
Radio Design Co., 1353 Sterling Pl., Brooklyn, N. Y.
RCA Mfg. Co., Camden, N. J.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.
Sensitive Research Instrument Corp., 4545 Bronx Blvd., New York, N. Y.
Shallcross Mfg. Co., 10 Jackson Ave., Collingdale, Pa.
States Co., 19 New Park Ave., Hartford, Conn.
Superior Instruments Co., 227 Fulton St., New York, N. Y.
Weston Electrical Instrument Corp., 614 Frelinghuysen Ave., Newark, N. J.

MAGNETIC TESTERS and TESTING MACHINES

Annis Co., R. B., 1101 N. Delaware St., Indianapolis, Ind.
Commercial Engineering Laboratories, 4612 Woodward Ave., Detroit, Mich.
General Electric Co., Schenectady, N. Y.
Magnetic Analysis Corp., 42-44 12th St., Long Island City, N. Y.
Pioneer Instrument Div. of Bendix Aviation Corp., Bendix, N. J.
Rawson Electrical Instrument Co., 102 Potter St., Cambridge, Mass.
Rubicon Co., 3751 Ridge Ave., Philadelphia, Pa.

Timers

AUTOMATIC CYCLE TIMERS

American Gas Accumulator Co., 1029 Newark Ave., Elizabeth, N. J.
Automatic Temperature Control Co., 33 E. Logan St., Philadelphia, Pa.
Betts & Betts Corp., 551 W. 52d St., New York, N. Y.
Bristol Co., Waterbury, Conn.
Brown Instrument Co., 4428 Wayne Ave., Philadelphia, Pa.
Controls, Inc., Towaco, N. J.
Cramer Co., R. W., Centerbrook, Conn.
Electric Switch Corp., 14th at Union St., Columbus, Ind.
Foxboro Co., Neponset Ave., Foxboro, Mass.
General Electric Co., Schenectady, N. Y.
Hanlon-Waters, Inc., Tulsa, Okla.
Industrial Instrument Co., 2249 14th St., S. W., Akron, Ohio
Industrial Timer Corp., 117 Edison Pl., Newark, N. J.
Luxtrol Co., 54 W. 21st St., New York, N. Y.
Minneapolis-Honeywell Regulator Co., 2712 Fourth Ave., S., Minneapolis, Minn.
Paragon Electric Co., 37 W. Van Buren St., Chicago, Ill.
Penn Electric Switch Co., Goshen, Ind.
Sangamo Electric Co., Springfield, Ill.
Stromberg Electric Co., 233 W. Erie St., Chicago, Ill.
Tagliabue Mfg. Co., C. J. Park & Nostrand Aves., Brooklyn, N. Y.
Taylor Instrument Companies, 100 Ames St., Rochester, N. Y.

Thomas Clock Co., Seth, Main & Trott Sts., Thomaston, Conn.
Thompson Clock Co., H. C., 38 Federal St., Bristol, Conn.
Walser Automatic Timer Co., 420 Lexington Ave., New York, N. Y.
Warren Telechron Co., Homer Ave., Ashland, Mass.
Western Electro-Mechanical Co., 300 Broadway, Oakland, Cal.
Wheelco Instruments Co., Harrison & Peoria Sts., Chicago, Ill.
Zenith Electric Co., 845 S. Wabash St., Chicago, Ill.

AUTOMATIC INTERVAL TIMERS

American Gas Accumulator Co., 1029 Newark Ave., Elizabeth, N. J.
American Timer Corp., Geneva, Ill.
Automatic Electric Mfg. Co., 729 S. Front St., Mankato, Minn.
Automatic Temperature Control Co., 33 E. Logan St., Philadelphia, Pa.
Betts & Betts Corp., 551 W. 52d St., New York, N. Y.
Bristol Co., Waterbury, Conn.
Controls, Inc., Towaco, N. J.
Cramer Co., R. W., Centerbrook, Conn.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
Electric Switch Corp., 14th at Union St., Columbus, Ind.
Fink-Roselleve Co., 109 W. 64th St., New York, N. Y.
Foxboro Co., Neponset Ave., Foxboro, Mass.
Frober-Faybor Co., Chagrin Falls, Ohio
General Electric X-Ray Corp., 2012 Jackson Blvd., Chicago, Ill.
Glogau & Co., Rand McNally Bldg., Chicago, Ill.
Guardian Electric Mfg. Co., 1621 W. Walnut St., Chicago, Ill.
Industrial Engineering Corp., Evansville, Ind.
Industrial Timer Corp., 117 Edison Pl., Newark, N. J.
Lektra Laboratories, Inc., 30 E. Tenth St., New York, N. Y.
Luers, J. Milton, 12 Pine St., Mt. Clemens, Mich.
Minneapolis-Honeywell Regulator Co., 2712 Fourth Ave., S., Minneapolis, Minn.
Paragon Electric Co., 37 W. Van Buren St., Chicago, Ill.
Photovolt Corp., 95 Madison Ave., New York, N. Y.
Potter & Brumfield Mfg. Co., Princeton, Ind.
Production Instrument Co., 710 W. Jackson Blvd., Chicago, Ill.
Standard Electric Time Co., 89 Logan St., Springfield, Mass.
Stromberg Electric Co., 233 W. Erie St., Chicago, Ill.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Thomas Clock Co., Seth, Main & Trott Sts., Thomaston, Conn.
Thompson Clock Co., H. C., 38 Federal St., Bristol, Conn.
Walser Automatic Timer Co., 420 Lexington Ave., New York, N. Y.
Warren Telechron Co., Homer Ave., Ashland, Mass.
Zenith Electric Co., 845 S. Wabash St., Chicago, Ill.

AUTOMATIC RESET TIMERS

American Gas Accumulator Co., 1029 Newark Ave., Elizabeth, N. J.
Automatic Electric Mfg. Co., 729 S. Front St., Mankato, Minn.
Automatic Temperature Control Co., 33 E. Logan St., Philadelphia, Pa.
Betts & Betts Corp., 551 W. 52d St., New York, N. Y.
Bristol Co., Waterbury, Conn.
Cramer Co., R. W., Centerbrook, Conn.
Dunn, Inc., Struthers, 1315 Cherry St., Philadelphia, Pa.
Mason-Neilan Regulator Co., 1190 Adams St., Boston, Mass.
Paragon Electric Co., 37 W. Van Buren St., Chicago, Ill.
Production Instrument Co., 710 W. Jackson Blvd., Chicago, Ill.
Stromberg Electric Co., 233 W. Erie St., Chicago, Ill.
Tagliabue Mfg. Co., C. J., Park & Nostrand Aves., Brooklyn, N. Y.
Taylor Instrument Companies, 100 Ames St., Rochester, N. Y.
Warren Telechron Co., Homer Ave., Ashland, Mass.
Zenith Electric Co., 845 S. Wabash St., Chicago, Ill.

AUTOMATIC SPOT WELD TIMERS

see Timers

Allen-Bradley Co., 136 W. Greenfield Ave., Milwaukee, Wis.
American Gas Accumulator Co., 1029 Newark Ave., Elizabeth, N. J.
Cramer Co., R. W., Centerbrook, Conn.
Cutler-Hammer, Inc., 1401 W. St. Paul Ave., Milwaukee, Wis.
Electric Controller & Mfg. Co., 2701 E. 79th St., Cleveland, Ohio
General Electric Co., Schenectady, N. Y.
United Cinephone Corp., Torrington, Conn.

PHOTO-ELECTRIC TIMERS

Automatic Electric Co., 1033 W. Van Buren St., Chicago, Ill.
General Control Co., 243 Broadway, Cambridge, Mass.
General Electric Co., Schenectady, N. Y.
Intercontinental Marketing Corp., 95 Madison Ave., New York, N. Y.
Photoswitch, Inc., 21 Chestnut St., Cambridge, Mass.
United Cinephone Corp., Torrington, Conn.

Tools

SCREWDRIVERS and SMALL INSULATED TOOLS

Bonney Forge & Tool Works, Allentown, Pa.
Bridgeport Hardware Mfg. Corp., Iranistan Ave., Bridgeport, Conn.
Crescent Tool Co., 200 Harrison St., Jamestown, N. Y.
Eastern Specialty Co., 3617-19 N. Eighth St., Philadelphia, Pa.
Forsberg Mfg. Co., 125 Seaview Ave., Bridgeport, Conn.
Hoosick Falls Radio & Electrical Parts Mfg. Co., First St., Hoosick Falls, N. Y.
Park Metalware Co., 28 Bank St., Orchard Park, N. Y.
Schollhorn Co., William, 414 Chapel St., New Haven, Conn.
Stanley Tools, Div. of Stanley Works, New Britain, Conn.
Utica Drop Forge & Tool Corp., 2800 Whitesboro St., Utica, N. Y.

Transmitters

AIRCRAFT TRANSMITTERS

Abbott Instrument, Inc., 8 W. 18th St., New York, N. Y.
Air Radio & Instrument Co., 5214 W. 63d St., Chicago, Ill.
Aircraft Radio Corp., Boonton, N. J.
Airplane & Marine Instruments, Inc., Clearfield, Pa.
Bassett, Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Bendix Aviation, Ltd., North Hollywood, Cal.
Bendix Radio, Div. of Bendix Aviation Corp., Baltimore, Md.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Communications Co., 2700 Ponce de Leon Blvd., Coral Gables, Fla.
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Electronic Specialty Co., 3456 Glendale Blvd., Los Angeles, Cal.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill. (See page 168.)
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Jefferson-Travis Radio Mfg. Corp., 380 Second Ave., New York, N. Y.
Lear-Avia, Inc., 1718 Broadway, Piqua, Ohio
Link, Fred M., 125 W. 17th St., New York, N. Y.
Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
National Co., 61 Sherman St., Malden, Mass.
Radio Frequency Laboratories, Inc., Boonton, N. J.
Radio Navigational Instrument Corp., 500 Fifth Ave., New York, N. Y.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Sparks-Withington Co., North St., Jackson, Mich.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.
Taylor Airphone Products, Inc., Municipal Airport, Long Beach, Cal.
Western Electric Co.—see Graybar Electric Co.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
Wilcox Electric Co., 3947 State Line, Kansas City, Mo.

BROADCAST TRANSMITTERS

American Communications Corp., 300 Broadway, New York, N. Y.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Farnsworth Television & Radio Corp., 3700 Pontiac St., Ft. Wayne, Ind.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill. (See page 168.)
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Marine Radio Corp., 117-19 168th St., Jamaica, N. Y.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
RCA Mfg. Co., Camden, N. J.
Skaggs Transformer Co., 5894 Broadway, Los Angeles, Cal.
Smith Co., Maxwell, 1027 N. Highland Ave., Hollywood, Cal.
Televiso Products Co., 2400 N. Sheffield Ave., Chicago, Ill.
Transmitter Equipment Mfg. Co., 36-01 35th St., Long Island City, N. Y.
United Cinephone Corp., Torrington, Conn.
United Sound Engrg. Co., 6642 Santa Monica Blvd., Hollywood, Cal.
Western Electric Co.—see Graybar Electric Co.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

FACSIMILE TRANSMITTERS

Finch Telecommunications, Inc., Passaic, N. J.
RCA Mfg. Co., Camden, N. J.

FM TRANSMITTERS

Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
General Electric Co., 1 River Rd., Schenectady, N. Y. (See page 79.)
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Link, Fred M., 125 W. 17th St., New York, N. Y.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Western Electric Co.—see Graybar Electric Co.
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

MARINE TRANSMITTERS

Bassett, Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Bendix Aviation, Ltd., North Hollywood, Cal.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Gates Companies, 200 Block Hampshire St., Quincy, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Hallicrafters Co., 2611 Indiana Ave., Chicago, Ill. (See page 168.)
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass. (See page 181.)

Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Jefferson-Travis Radio Mfg. Corp., 380 Second Ave., New York, N. Y.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Link, Fred M., 125 W. 17th St., New York, N. Y.
National Co., 61 Sherman St., Malden, Mass.
Radiomarine Corp. of America, 75 Varick St., New York, N. Y.
Radio Receptor Co., 251 W. 19th St., New York, N. Y.
RCA Mfg. Co., Camden, N. J.
Spokane Radio Co., 611 First Ave., Spokane, Wash.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.
Western Electric Co.—see Graybar Electric Co.

MOBILE TRANSMITTERS

Abbott Instrument Co., 8 W. 18th St., New York, N. Y. (See page 153.)
Bassett, Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Gates Companies, 200 Block Hampshire St., Quincy, Ill.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributors for Western Electric Co., New York, N. Y.)
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass. (See page 181.)
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Kaar Engineering Co., 619 Emerson St., Palo Alto, Cal.
Link, Fred M., 125 W. 17th St., New York, N. Y.
Majestic Radio & Television Corp., 2600 W. 50th St., Chicago, Ill.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
Radio Transceiver Laboratories, 120-03 Jamaica Ave., Richmond Hill, N. Y.
RCA Mfg. Co., Camden, N. J.
Spokane Radio Co., 611 First Ave., Spokane, Wash.
Western Electric Co.—see Graybar Electric Co.

POLICE TRANSMITTERS

Abbott Instrument, Inc., 8 W. 18th St., New York, N. Y.
Bassett, Inc., Rex, Municipal Airport, Fort Lauderdale, Fla.
Bendix Aviation, Ltd., North Hollywood, Cal.
Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Communications Co., 2700 Ponce de Leon Blvd., Coral Gables, Fla.
Doolittle Radio, Inc., 7421 S. Loomis Blvd., Chicago, Ill.
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.
Gates Companies, 200 Block Hampshire St., Quincy, Ill.
General Electric Co., Schenectady, N. Y.
Graybar Electric Co., Lexington Ave. at 43d St., New York, N. Y. (Sole Distributor for Western Electric Co., New York, N. Y.)
Harvey Radio Laboratories, Inc., 447 Concord Ave., Cambridge, Mass. (See page 181.)
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National Co., 61 Sherman St., Malden, Mass.
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RCA Mfg. Co., Camden, N. J.
Spokane Radio Co., 611 First Ave., Spokane, Wash.
Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.
Stromberg-Carlson Telephone Mfg. Co., 100 Carlson Rd., Rochester, N. Y.
Western Electric Co.—see Graybar Electric Co.

PORTABLE TRANSMITTERS

Gates Companies, 200 Block Hampshire St., Quincy, Ill.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
RCA Mfg. Co., Camden, N. J.

RELAY BROADCAST TRANSMITTERS

Collins Radio Co., 2920 First Ave., Cedar Rapids, Iowa
Federal Telegraph Co., 200 Mt. Pleasant Ave., Newark, N. J.
General Electric Co., 1 River Rd., Schenectady, N. Y.
Harvey-Wells Communications, Inc., North St., Southbridge, Mass.
Radio Engineering Laboratories, Inc., 35-54 36th St., Long Island City, N. Y.
RCA Mfg. Co., Camden, N. J.

TELEVISION TRANSMITTERS

Du Mont Laboratories, Inc., Allen B., 2 Main Ave., Passaic, N. J. (See p. 118.)
Farnsworth Television & Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.
General Electric Co., 1 River Rd., Schenectady, N. Y.
RCA Mfg. Co., Camden, N. J.

Winders

COIL WINDERS—see Machines

HOW TO USE THIS BUYERS GUIDE

IN THIS DIRECTORY of suppliers, products are alphabetically listed in three separate sections:

1—PARTS, ACCESSORIES, MATERIALS

Basic commodities used in the fabrication, assembly and maintenance of electronic devices

2—ELECTRICAL INSTRUMENTS

Test and measurement items used in the design, production and adjustment of electronic devices

3—ELECTRONIC EQUIPMENT

Devices having electronic operating principles, used by other fields as well as by the electronic industry itself

In each of these three sections products are listed under the noun or principal word. Certain products, not readily classified, have been arbitrarily included in the third section. The index on pages D-2 and D-3 serves as a general key to all three sections.

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DEFY ERASURE-GHOSTS
with this new tracing cloth

Here is a tracing cloth that holds erasure scars at a minimum—that won't show water marks or perspiration stains. Now you can have clean tracings, in pencil or ink, free from these untidy "ghosts" that reproduce on blueprints!

For PHOENIX is ghost-proofed by a remarkable new process that defies moisture and gives you an unusually durable working surface. You can use harder pencils with this improved cloth and get sharper lines with less tendency to smudge. Even 6H lines show clearly, and reproduce sharply! Erasing does not mar the drawing surface; erased areas take pencil smoothly—and ink without feathering. Its new white color and increased transparency give you excellent drawing contrast and produce strong blueprints.

Let PHOENIX prove its virtues on your own drawing board. See your K&E dealer, or write for a generous working sample and an illustrated brochure.

EST. 1867
KEUFFEL & ESSER CO.
NEW YORK · HOBOKEN, N. J.
CHICAGO · ST. LOUIS · SAN FRANCISCO · LOS ANGELES · DETROIT · MONTREAL

PHOENIX DEFIES MOISTURE GHOSTS

Perspiration and water splashes on ordinary tracing cloth create "ghosts" which reproduce on blueprints. PHOENIX Tracing Cloth withstands actual immersion in water for fully 10 minutes at a time! *Perspiration and water marks will not stain it!*

PHOENIX LESSENS SMUDGE GHOSTS

The new improved surface of PHOENIX Tracing Cloth permits you to use harder pencils (5H and 6H) and to get sharper lines with less tendency to smudge.

Result: Cleaner tracings and blueprints.

PHOENIX REDUCES ERASURE GHOSTS

Ordinary tracing cloths become scarred when erased... erased spots produce ghosts on blueprints.

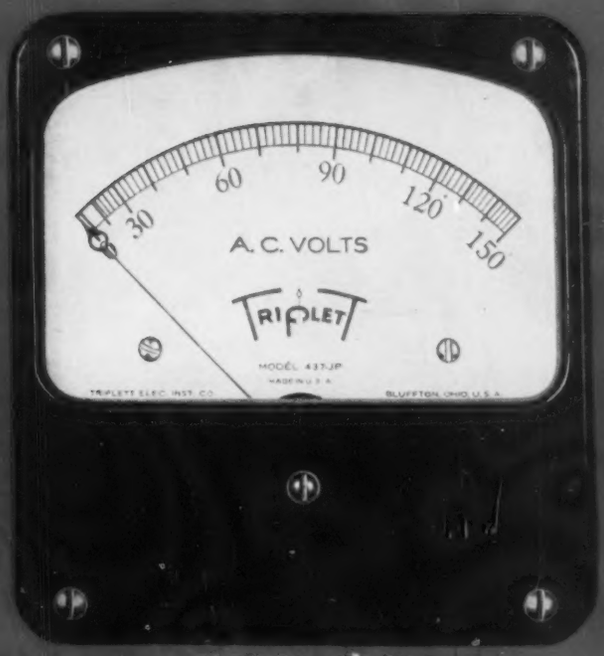
PHOENIX has a durable drawing surface that reduces working scars to a minimum.

K&E
Phoenix
REG. U.S. PAT. OFF.
TRACING CLOTH
for pencil *and* ink

TRIPLETT

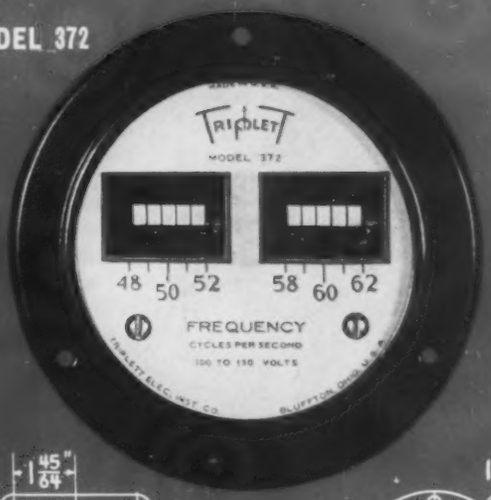
NEW *Combat Line* INSTRUMENTS

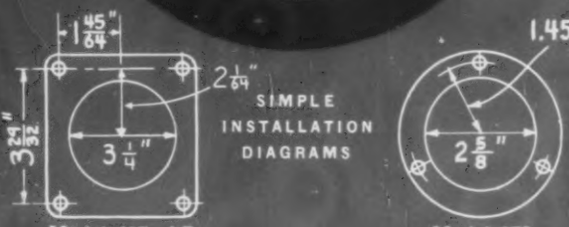
THESE PHOTOGRAPHIC REPRODUCTIONS ARE THREE-QUARTER SIZE



MODEL 437-JP

MODEL 372





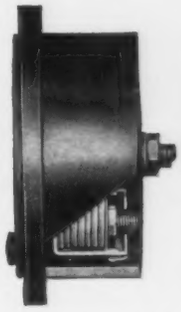
SIMPLE INSTALLATION DIAGRAMS

Model 437-JP

Model 372

Maximum Service in Minimum Space

TRIPLETT *Thin Line* INSTRUMENTS



Precision performance by new *thin* instrument with *standard* Triplett movement housed in either metal or molded case. No projecting base; wider shroud to strengthen face; simplified zero adjustment; balanced bridge support; metal bridges at both ends; doubly supported core. For "Precision in limited space" write for Triplett Thin Line Bulletin.

The Triplett Combat Line

New Answers to specialized needs of War: Production Speed-up and Standardization; Performance under the Stress and Vibrations of Combat Service.

Model 437 J P—A rectangular line of meters to meet dimensions shown (see diagram). Wide-open scale for maximum readability. Complete coverage AC-DC Voltmeters, Ammeters and Wattmeters. Magnetic or static shielding provided on order. Molded Plastic Case for maximum protection in high voltage circuits. Pivots, Jewels and other component parts designed to meet severe vibration requirements.

Model 372—Frequency Meter—"All-American make" Vibrating Reed Frequency Meter. Maximum readability by grouping of Reeds. Range-Frequency-Voltage to meet specific requirements. Protected against excessive panel vibration. In standard 3 inch mounting or on special order in any cataloged Triplett Case.

A WORD ABOUT DELIVERIES

Naturally deliveries are subject to necessary priority regulations. We urge prompt filing of orders for delivery as may be consistent with America's War effort.

TRIPLETT ELECTRICAL INSTRUMENT CO.
BLUFFTON, OHIO

TRIPLETT

Centralab *now Serves Itself and the Industry with* STEATITE

CENTRALAB has added a new plant of large capacity for the production of glazed and unglazed STEATITE.

This highly critical, strategic material is an important factor in the operation of ultra high frequency equipment.

Centralab's STEATITE plant is in a position to furnish coil forms up to 5 inches diameter and pressed pieces to approximately 6 inches square. The same high standards of excellence will be maintained in this department that have characterized every other Centralab product during the past decades. The Centralab Ceramic department that has been in existence since 1930 has built up an extensive engineering, production and laboratory background to ensure a product of the highest quality that fully meets military specifications.

STEATITE is an extremely dense non-porous ceramic of high mechanical strength with low loss factor and low dielectric constant. It can be fabricated in various cylindrical and flat shapes by extrusion or pressing. Centralab is also equipped to engineer and manufacture other grades of ceramics.

CENTRALAB — Division of Globe-Union Inc., Milwaukee, Wis.

1930 Centralab pioneered a fixed resistor of "hard-as-stone" ceramic material.

1936 Centralab added a temperature compensating fixed condenser of ceramic material.

1940 Centralab added a trimmer condenser with temperature compensating characteristics

Ceramics by Centralab

1942 Centralab added a STEATITE plant to take care of its own needs and those of the industry.

TO OPEN NEW DOORS OF RESEARCH!

An example of how RCA electronic research is leading to new progress in science and industry

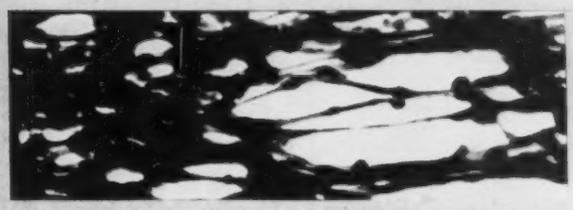
The RCA Electron Microscope is one of the hundreds of practical tools for progress that RCA electronic research has developed. Using electrons instead of rays of light, and electro-magnetic fields instead of lenses, the RCA Electron Microscope enables man to peer deeper into the hidden, sub-microscopic world than ever seemed possible before. Magnification as high as 100,000 diameters can be easily obtained—*fifty times* greater than is possible with the best optical oil-immersion microscope.

For industry it has meant closer insight into many processes, a better understanding of the methods for making, treating, and preserving materials.

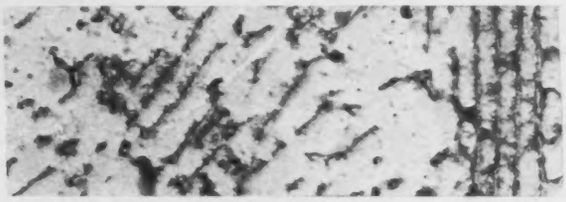
For chemistry it has meant the opportunity to study, for the first time, details of molecular design and structure, so that there can be a continued advance in the creation of such products as nylon, rayon, synthetic rubber, and plastics.

For medical science it will mean the opportunity to observe, for the first time, how the body fights bacterial and virus diseases—such as infantile paralysis, smallpox, influenza, the common cold and many others.

For all America—and when peace returns, for all the world,—this product of RCA electronic research will lead the way to a richer and fuller life.



Micrograph showing Vinylite in one of its many stages of polymerization. The study of plastics is aided by the RCA Electron Microscope, which enables observation of the polymerization process, typical of the plastics.



Micrograph of Pearlite steel, a carbon steel formed by controlled annealing. By using very thin replicas of the surface, the structure of practically all metals can be studied with the RCA Electron Microscope.

Tobacco mosaic virus, seen for the first time by the human eye through the RCA Electron Microscope. The virus represents a large protein molecule, very injurious to tobacco. These observations may lead to the development of an anti-virus serum or antibody.

Micrograph of staphylococcus bacteria,—pus producing organisms which can attack any part of the body and cause painful and dangerous infections. The RCA Electron Microscope enables scientists to observe their actual structure, thus leading to important work in protecting man against this bacteria.

RCA

RCA LEADS THE WAY

IN RADIO — IN ELECTRONICS — IN TELEVISION

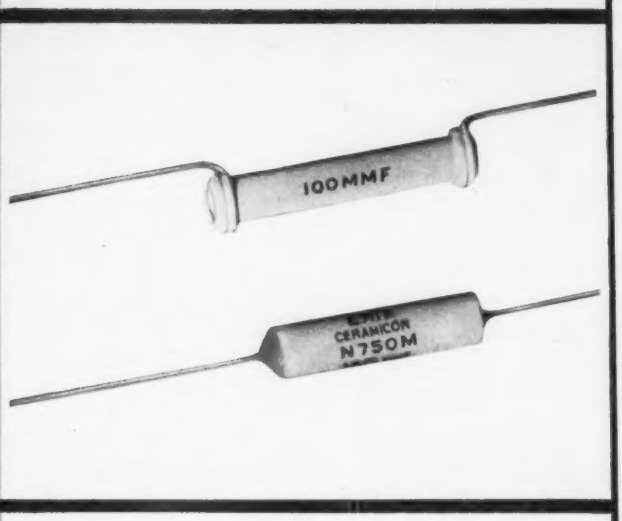
RCA Manufacturing Co., Inc., Camden, N. J.

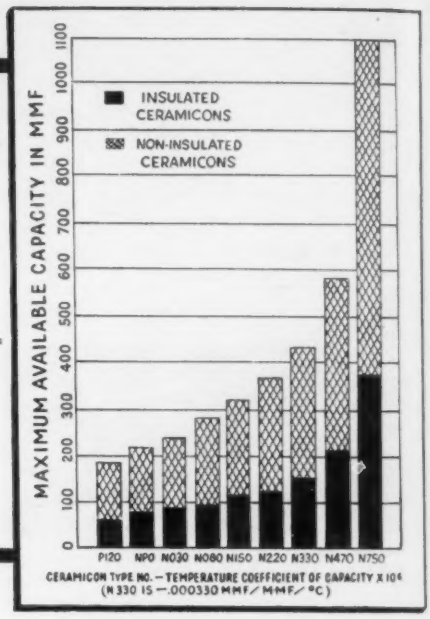
RCA ENLISTS THE ELECTRON TO O

USE *Erie Ceramicons*

REG. U.S. PAT. OFF.

FOR MICA CONDENSER REPLACEMENTS





THE scarcity of high grade mica makes it essential for manufacturers of electronic equipment to switch to other types of condensers.

The dependability of the silvered-ceramic construction of Erie Ceramicons has been definitely proved by their use in many types of installations over 6 years.

In using Ceramicons for mica replacements, the function of the capacitor in question should be considered in selecting the proper type. When practically no change of capacity with temperature is permissible, zero coefficient (type NPO) should be specified. Where moderate variations are allowable, maximum negative coefficient (type N750) or some intermediate value should be used to take advantage of the smaller size of Ceramicons available in the higher negative coefficients.

Where rather large variations are allowable, and where power factor is not critical, a new series of high dielectric constant Ceramicons, which will be available shortly, should be specified, since very high capacities will be available in this type of unit.

The chart reproduced above shows the range of standard Ceramicons. The new high dielectric constant Ceramicons will be available up to approximately 5,600MMF in the insulated style and to approximately 16,000MMF in the non-insulated style.

Write for literature that fully describes the operating characteristics of standard Erie Ceramicons.

ERIE RESISTOR CORP., ERIE, PA. LONDON, ENGLAND · TORONTO, CANADA.

Product of

UNITED

Skills in Electronics

"UNITED" electronic power tubes cannot be spun out on swift, automatic assembly lines. The painstaking manufacturing of these sensitive devices requires the skill of human hands.

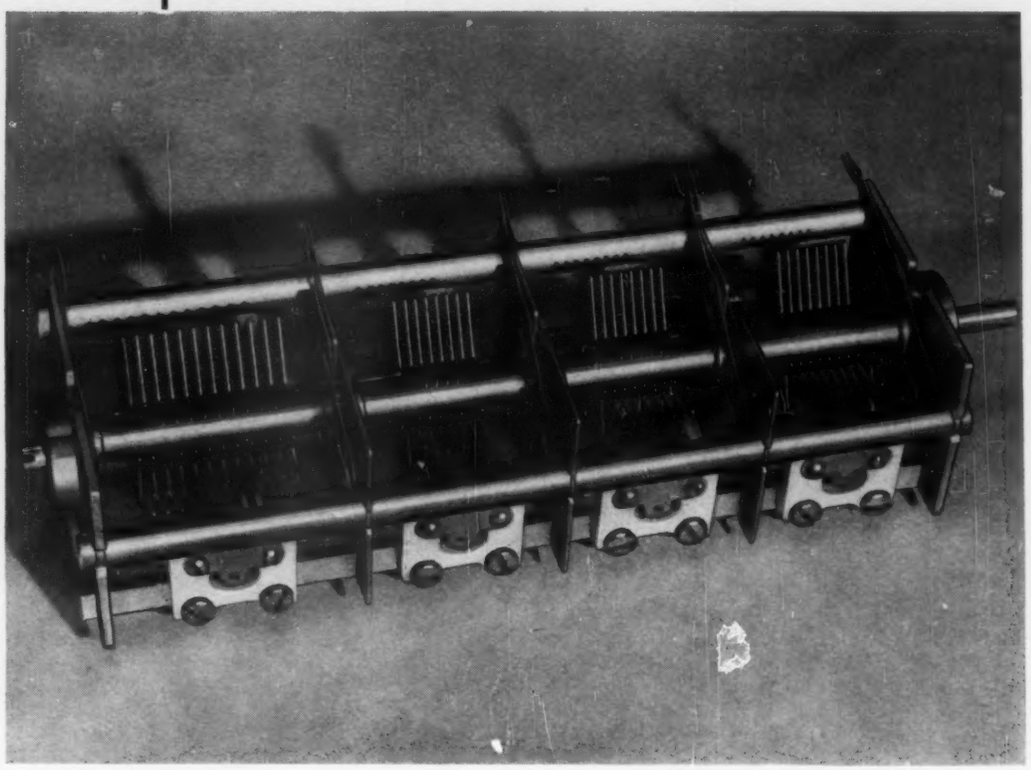
Here at the "United" Plant, incredibly accurate hands perform under a system of personal supervision by electronic engineers. One by one, the steps of forming and fitting the stems, leads, plates, grids, wires and rods combine to produce transmitting tubes of such flawless precision that they consistently win top rating for performance. Never before were the hands of craftsmen and the brains of scientists so superbly "United" in advancing the scope and purpose of electronics.

Consistent technical advances in tubes, now required for war, some day will be more readily available to you for radio communication, physiotherapy and industrial electronics. Remember to look for "United" on the tubes.

UNITED ELECTRONICS COMPANY

NEWARK, NEW JERSEY

SMOOTH ACTION



Over-sized bearings provide smooth action

HAMMARLUND variable condensers are noted for their smooth action. Superior mechanical design has made them the first choice of engineers who demand precise mechanical and electrical performance.

THE HAMMARLUND MANUFACTURING CO., INC.
460 West 34th Street, New York, N. Y.

CHECK THESE VITAL TURBO PRODUCTS AGAINST ELECTRICAL INSULATION PROBLEMS

VARNISHED OIL TUBING

SATURATED SLEEVING

VARNISHED GLASS TUBING

EXTRUDED TUBING

WIRE IDENTIFICATION MARKERS

BLOCK MICA, MICA PRODUCTS

VARNISHED CAMBRICS, TAPES, ETC.

EACH HAS SPECIFIC ADVANTAGES REQUIRED TO OBTAIN HIGHEST OPERATING EFFICIENCY

There's the whole story behind the extensive use of TURBO flexible tubing—all the essential attributes to meet the urgent demand for an insulation that 'can keep coming back for more'.

Flexible Varnished Oil Tubing—meeting the all-purpose requirements of a sleeve insulation to stand guard against breakdown, moisture absorption, etc.

Varnished Glass Tubing—for those applications where extremely high heat resistance is a prerequisite.

Extruded Tubing—where extreme sub-zero temperature resistance to any effects of embrittlement becomes the important consideration.

Wire Identification Markers—when strict compliance with Army, Navy and Air Corps specifications is necessary.

Various Insulation Materials—for the diversity of requirements in which tapes, cloths, sheets, etc., are needed.

For proof, ask for samples of each. Specimen board and list of sizes will be sent promptly without obligation.

IF ITS TURBO · IT SAFE-GUARDS ·

WILLIAM BRAND & COMPANY

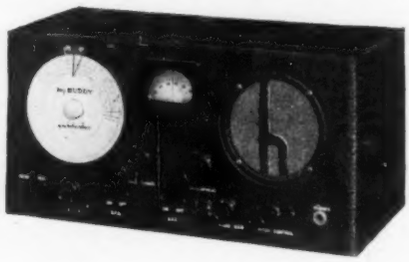
276 FOURTH AVE., NEW YORK, N. Y. ● 325 W. HURON ST., CHICAGO, ILL.

the Sky Buddy was good...but—

THOUSANDS *of Hallicrafters Sky Buddies* gave faithful service . . . years of excellent performance! Sky Buddy owners will be amazed at how far-reaching the progress of research and new electronic development has been, even in the past year.

When Hallicrafters are again permitted to sell communications receivers for civilian use your new Sky Buddy will have so many improvements, comparison with the old models will be a difficult accomplishment.

Illustration (top) partial view of Hallicrafters Signal Corps communications equipment.

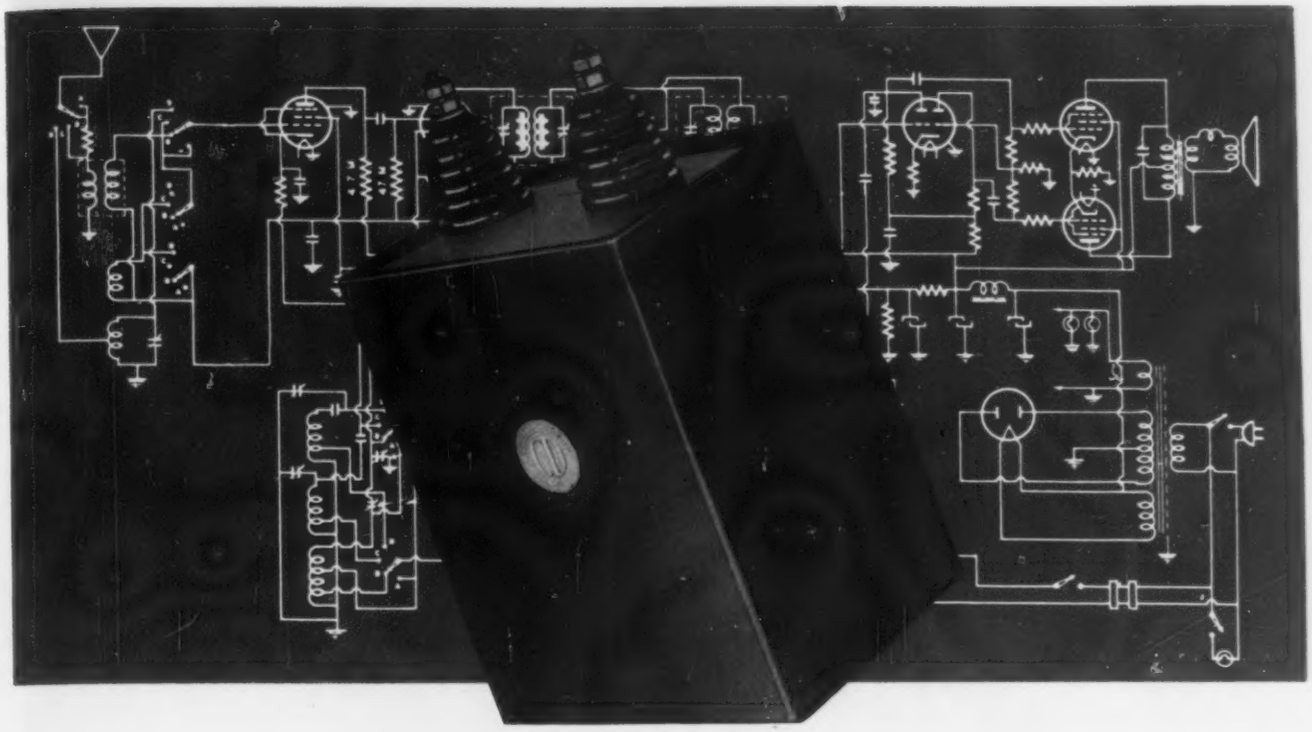


the hallicrafters co.

CHICAGO, U. S. A.

keep communications open!

ARMY E NAVY



WHEN THE BLUEPRINT CALLS FOR CAPACITORS

give your equipment maximum reliability by using C-D Capacitors

Capacitors may look alike but C-Ds are engineered and manufactured by specialists who have made them their lifework. The combined, accumulated experience of 32 years' concentration on capacitors exclusively — is translated into the significant *extra* component that gives C-Ds their *extra* measure of stamina and longer life. C-D means "capacitors dependability"—a very good reason why there are more Cornell-Dubilier Capacitors in use today than any other make. Isn't that worth remembering . . . when the blueprint calls for capacitors?

As the materials used in the manufacture of capacitors are under control, we are permitted to produce only against those orders carrying the necessary Preference Rating Extensions. Should you be unable to enjoy the finer performance of C-Ds now, we do look forward to serving you once again when Victory has been won.

C-D HIGH VOLTAGE DYKANOL CAPACITORS

Type **TK**

These capacitors are universally accepted as the finest ever offered in larger capacity and higher voltage for filter service. Because of their compact construction the design engineer will find them suitable where space limitations are a problem.

Typical features of these outstanding capacitors are:

- Impregnated and filled with non-inflammable, non-explosive Dykanol, the impregnant noted for its high dielectric constant and stability under all operating conditions.
- Hermetically sealed and therefore not affected by moisture, time or temperature up to 93°C.
- Dried, impregnated and filled under continuous vacuum resulting in lower equivalent series resistance, longer life.
- Conservatively rated—will safely operate continuously at 10% above rated voltage.
- Encased in sturdy, arc-welded steel case, painted with a special blue-gray weather-proof, non-corrosive lacquer.
- Supplied with heavy-duty wet-process glazed porcelain insulator. These insulators are pressure-sealed resulting in leakproof joints and high dielectric strength.

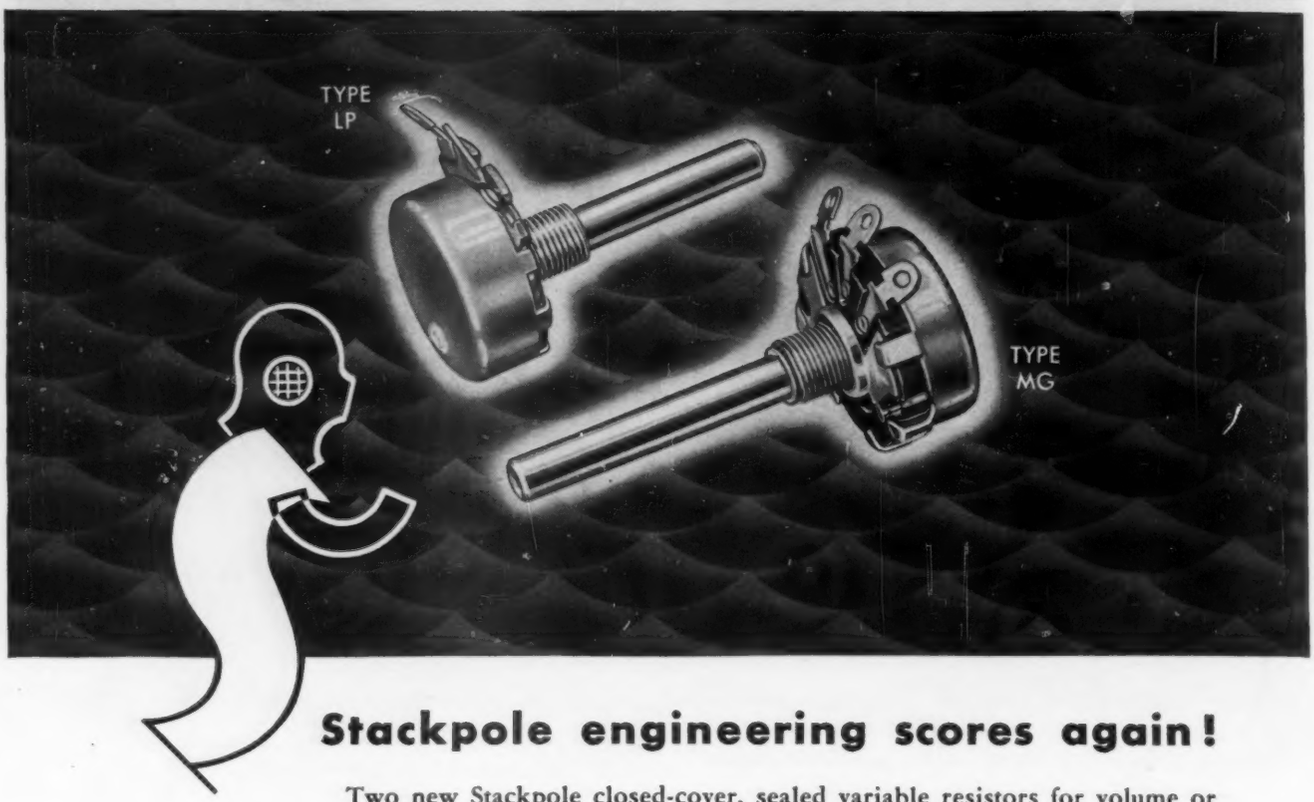
For further details write for Catalogue No. 160T
Cornell-Dubilier Electric Corporation
South Plainfield, N. J.

more in use today than any other make

Cornell Dubilier capacitors

Mica • Paper • Dykanol • Wet & Dry Electrolytic Capacitors

SEALED VARIABLE RESISTORS
TO MEET HIGHLY HUMID OR DUSTY CONDITIONS



Stackpole engineering scores again!

Two new Stackpole closed-cover, sealed variable resistors for volume or sensitivity use, meet today's demand for units which will perform faithfully anywhere from the world's wettest, most humid places to its dustiest, sandiest spots—and in either standard radio or high frequency equipment.

The Type MG Variable Resistor is designed for extremely humid or salt spray conditions and for use in equipment where internal and external leakage must be held to a minimum. Actually, its leakage resistance is on the order of 300 meg. after 48 hours in 95% humidity at 40° C.

The famous Stackpole Type LP Variable Resistor is now furnished with a dust-proof cover and effectively sealed with a special compound to the point where resistivity from current carrying parts after 48 hours of 95% relative humidity at 40° C. is five times that of the previous open construction resistors.

STACKPOLE CARBON COMPANY, ST. MARYS, PENNA.

MOLDED RARE METAL CONTACTS

...also carbon, graphite and composition types

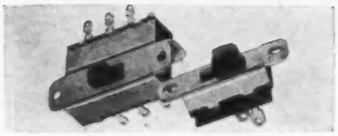
CARBON PRODUCTS

Brushes (for all rotating machines)—Anodes—Electrodes—Brazing Blocks—Bearings—Welding Rods, Electrodes and Plates—Pipe—Packing, Piston and Seal Rings—Rheostat Plates and Discs—Brake Lining, etc.

• • •

Sold to manufacturers only—Catalog and samples upon request

STACKPOLE



SWITCHES Slide operated (either indexed or momentary contact type)—Rotary Index and Toggle types.

RESISTORS *(fixed or variable)* Carbon composition resistors, fixed types up to 4 watts. Variables in 4 different types.

IRON CORES Molded from powders in a variety of grades and sizes and for use at frequencies to 150-175 meg.

Here's More Good News About

Leadless **MYCALEX** **Insulating Material**

THE INSULATOR

Trade Mark Reg. U.S. Pat. Off.

A PRICE REDUCTION

is put into immediate effect by

MYCALEX CORPORATION OF AMERICA

Exclusive Licensee under all patents of "MYCALEX" (PARENT) Co., Ltd.

Applicable to full sheets in 7 of the 9 thicknesses

HOW MUCH? As much as 18% reduction in price of some sizes. Phone, wire or write for new price list, effective Nov. 2, 1942.

WHY? After a decade of unchanged prices, we now find that our accelerated production facilities result in lower costs. We feel that vital war materials should be made available as cheaply as possible to all users, to encourage even wider applications.

DELIVERIES? Last month we stated in various trade and technical publications that THE BOTTLE-NECK HAS BEEN BROKEN. We can supply full sheets of Leadless MYCALEX Insulating Material in large quantities, immediately. If you are using make-shift or substitute materials, change to Leadless MYCALEX Insulating Material.

SOME FACTS ABOUT MYCALEX INSULATING MATERIAL

"The most nearly perfect electrical insulator known today" is what leading engineers say about Leadless MYCALEX Insulating Material. It is a ceramic, possessing the following characteristics of mechanical strength and low-loss electrical properties, as determined by an independent laboratory:

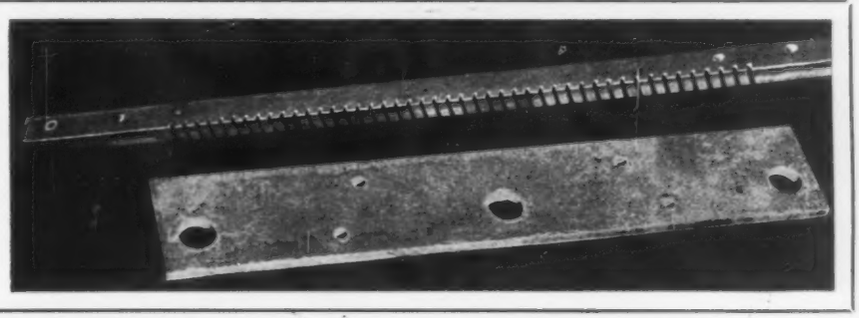
CHARACTERISTICS:

**Dielectric constant*	*6.4*	*Dielectric strength*	*640 volts per mil.*
**Power factor*	*0.0023*	*Specific gravity*	*2.5*
**Loss factor*	*1.49*	*Transverse strength*	*13,000 lbs. per sq. in.*

*Measured at 300 kilocycles after 96 hours in distilled water according to Navy Specification RE-13A-317F.

Leadless MYCALEX Insulating Material is MACHINEABLE

Your own mechanics can machine MYCALEX Insulating Material to accurate dimensions. Or, send us your specifications and let us quote on machined parts fabricated in our machine shop at our new plant in Clifton, N. J.



Write for our free illustrated booklet describing uses, machining technique, etc. Address:

MYCALEX CORPORATION OF AMERICA

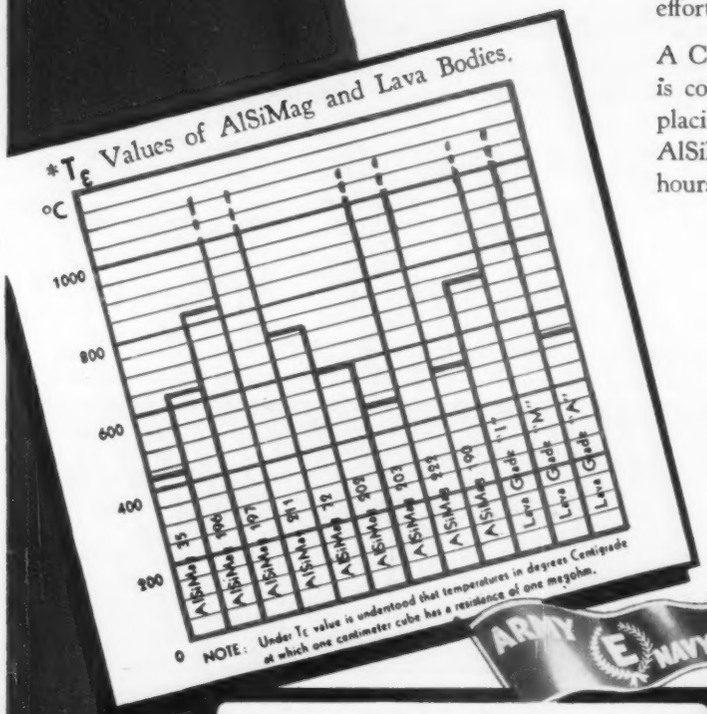
60 CLIFTON BOULEVARD, Dept. 2M, CLIFTON, N. J.

Do You Know the T_ε Value* of Your Insulation?

THE T_ε values of AlSiMag ceramic compositions are among the many physical characteristics given in Property Chart No. 416.

Frequently it is very difficult for the designing engineer to get information as to detailed characteristics of an insulating material which he wishes to employ in his design. Therefore, American Lava Corporation took great pains in an effort to furnish such information in Property Chart No. 416.

A Copy of this chart will be sent free on your request. It is conveniently arranged for filing, hanging on the wall or placing under desk glass. It takes only a moment to request AlSiMag Property Chart No. 416. It might save you many hours or days of laboratory experiment.



AlSiMag Property Chart No. 416 Gives Complete Physical Characteristics of the Most Frequently Used AlSiMag Compositions. Free on Request.

ARMY E NAVY

AWARDED JULY 27, 1942

AlSiMag

TRADE MARK REGISTERED U. S. PATENT OFFICE

AMERICAN LAVA CORPORATION

CHATTANOOGA, TENNESSEE

U. S. MARINE CORPS PHOTO

...where they'll do the most good

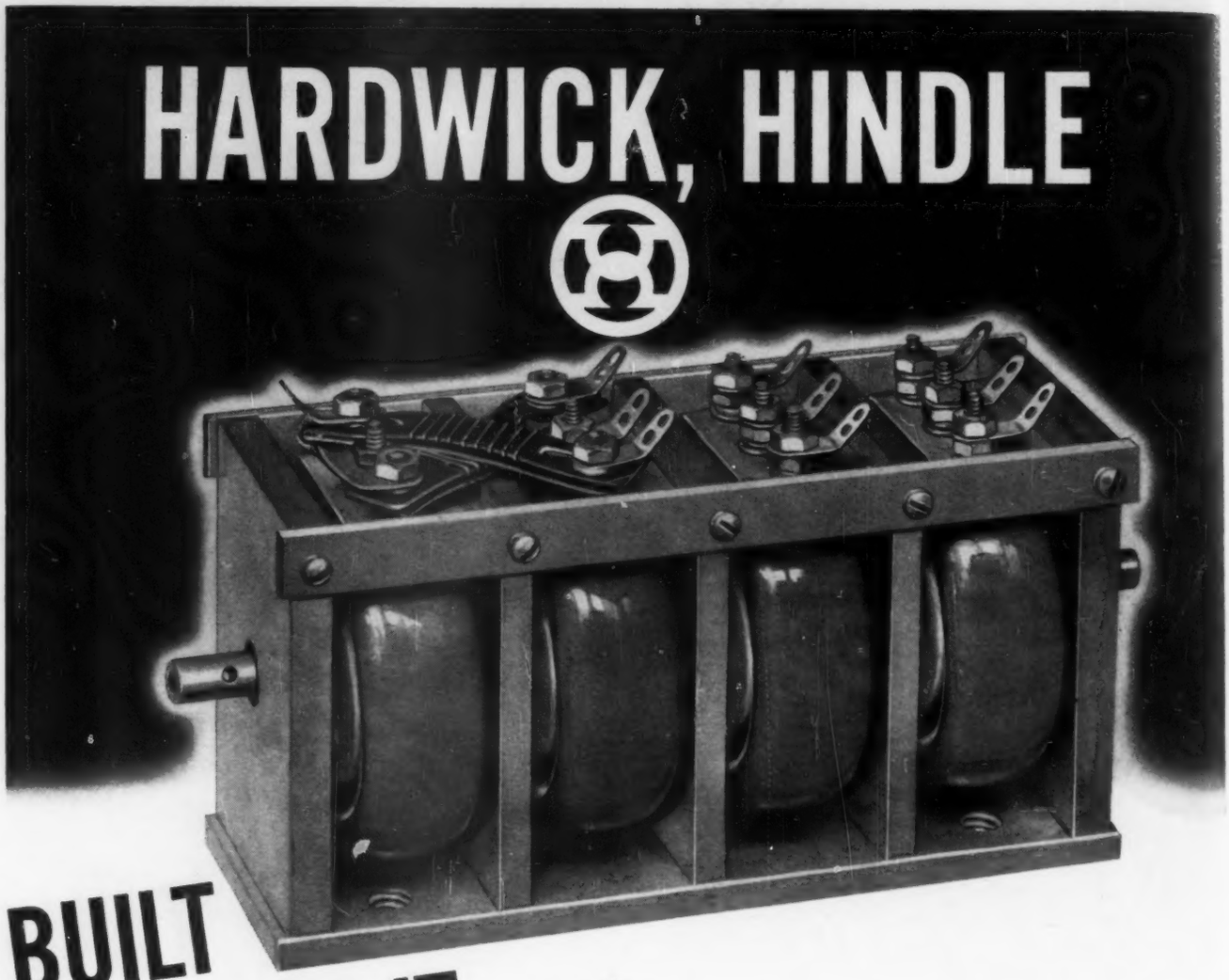
Latest Jefferson-Travis two-way radio communication equipments are limited to the Armies and the Navies of the United Nations. Only the men in combat units or in the most vital services have them. *They are where they'll do the most good.*

JEFFERSON-TRAVIS RADIO MFG. CORP.

Manufacturers of Aircraft, Marine and Mobile Radio Communication Equipment

NEW YORK, N. Y. WASHINGTON, D. C.

HARDWICK, HINDLE



BUILT TO TAKE IT . . .

This special 4 gang assembly of 50 watt rheostats is exceptionally rugged and compact. It's a fine example of the great adaptability to unusual conditions of our metal base design.

It is gear operated for equipment in important combat units; and it is standing up under terrific use. This special assembly has withstood a 2000 foot-pound shock giving an acceleration to the unit of 300 G.

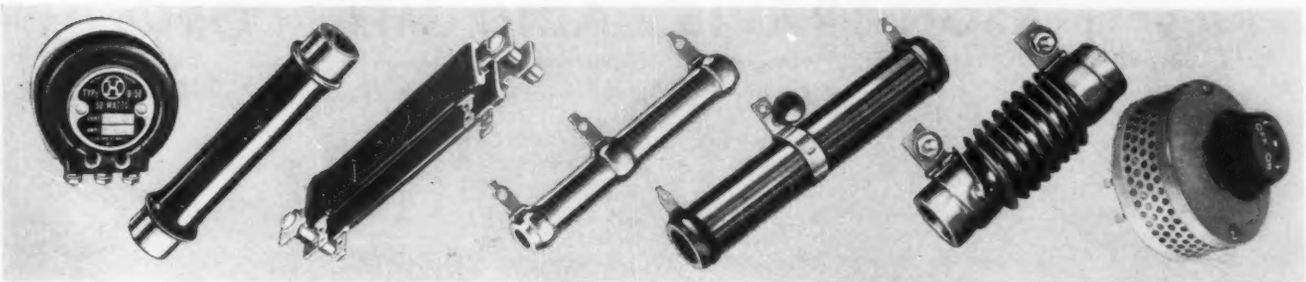
As in all Hardwick Hindle rheostats of this type the exclusive features assure you of 25% more capacity for handling possible overloads—and consequently more heat dissipation—less temperature rise without taking up more space. Our deeper winding form gives more wire, more surface area.

We offer many other types of rheostats and resistors with important exclusive advantages.

Please consult us—

HARDWICK, HINDLE, Inc.

Newark, N. J., U.S.A.



NEW THINGS.

ARE COMING *Fast!*

IN laminated plastic materials, as in so many others, the new conditions imposed by war have led to intensified research which has developed new products and new qualities that are certain to be valuable after the war.

Formica, with the assistance of customers and suppliers, has had a share in this progress. Some of the new things: laminated plastic name plates, glass cloth base insulating material to serve some of the uses of ceramics; arc resistant insulation, "Pregwood", a light, strong, impregnated wood that serves many mechanical uses, and fluorescent instrument panels visible in the dark.

When the war is over let us tell you about the new things in Formica that might serve you better.

FORMICA

THE FORMICA INSULATION COMPANY, 4661 SPRING GROVE AVE., CINCINNATI, OHIO

Are you choosing your resistors with wartime care?

LET THIS "GLOBAR" CHART GUIDE YOU!

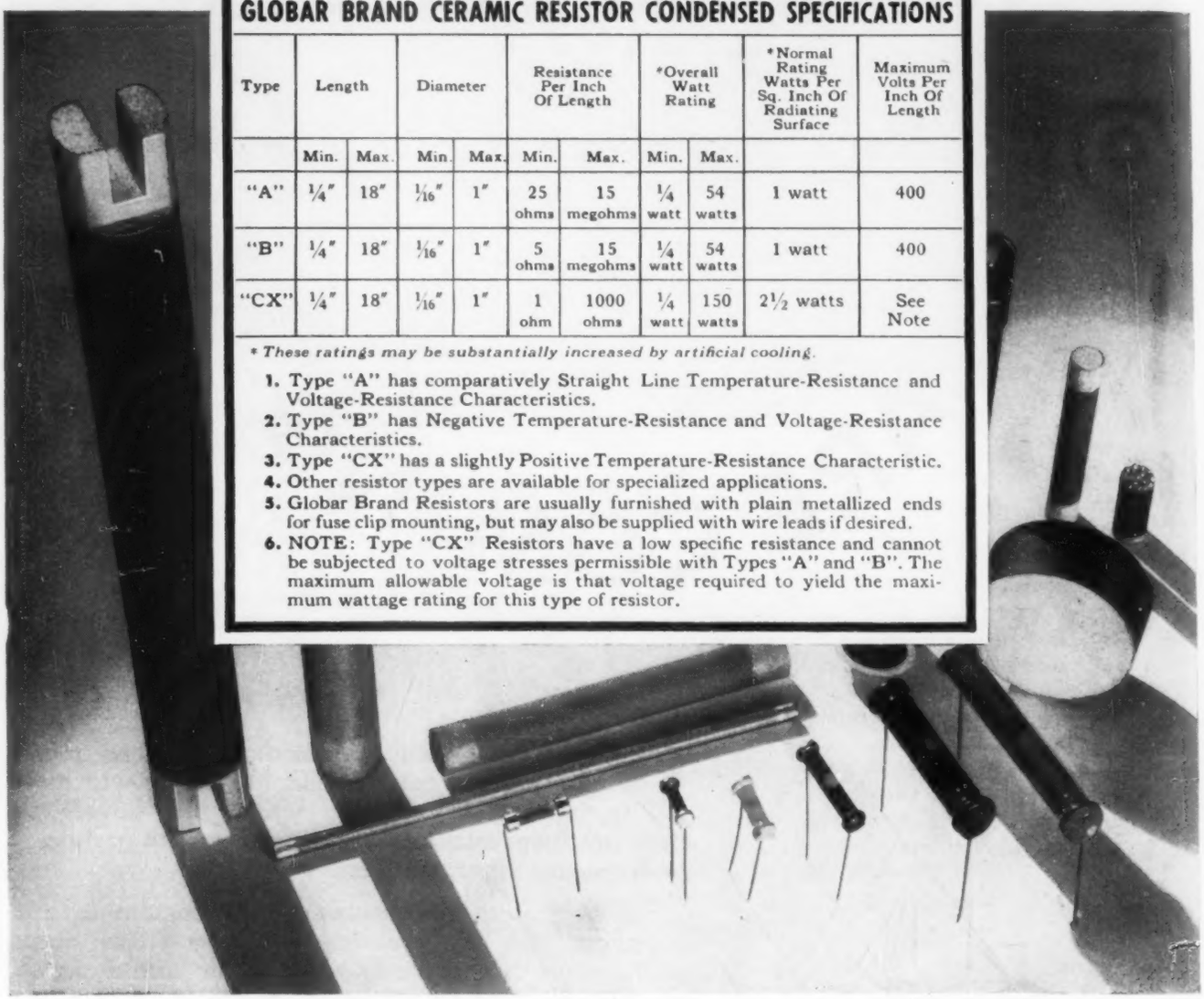
"GLOBAR" Ceramic Resistors are non-inductive and have excellent radio frequency characteristics. They are rugged, have liberal overload capacity. Standard terminals consist of metallized ends; permitting neat, orderly assembly in fuse clips or other types of mountings. "Globar" Resistors are available in many shapes and sizes in the types whose characteristics are briefly outlined below. "Globar" Resistors are available in three tolerances on specified resistance: 5%, 10% and 20%. In designing or ordering please do not specify 5% tolerance when 10% will do the job, or 10% when 20% will suffice. The closer tolerances slow up production. To conserve your time and to assist you in selecting the resistor best suited to your purpose our long experience in specialized resistor manufacture is at your service. Send us full details of your requirements and your problem will have our immediate consideration.

GLOBAR BRAND CERAMIC RESISTOR CONDENSED SPECIFICATIONS

Type	Length		Diameter		Resistance Per Inch Of Length		*Overall Watt Rating		*Normal Rating Watts Per Sq. Inch Of Radiating Surface	Maximum Volts Per Inch Of Length
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
"A"	1/4"	18"	1/16"	1"	25 ohms	15 megohms	1/4 watt	54 watts	1 watt	400
"B"	1/4"	18"	1/16"	1"	5 ohms	15 megohms	1/4 watt	54 watts	1 watt	400
"CX"	1/4"	18"	1/16"	1"	1 ohm	1000 ohms	1/4 watt	150 watts	2 1/2 watts	See Note

** These ratings may be substantially increased by artificial cooling.*

1. Type "A" has comparatively Straight Line Temperature-Resistance and Voltage-Resistance Characteristics.
2. Type "B" has Negative Temperature-Resistance and Voltage-Resistance Characteristics.
3. Type "CX" has a slightly Positive Temperature-Resistance Characteristic.
4. Other resistor types are available for specialized applications.
5. Globar Brand Resistors are usually furnished with plain metallized ends for fuse clip mounting, but may also be supplied with wire leads if desired.
6. NOTE: Type "CX" Resistors have a low specific resistance and cannot be subjected to voltage stresses permissible with Types "A" and "B". The maximum allowable voltage is that voltage required to yield the maximum wattage rating for this type of resistor.



Globar CERAMIC RESISTORS
BRAND

Globar Division **THE CARBORUNDUM COMPANY** *Niagara Falls, N. Y.*
REG. U. S. PAT. OFF.

(Carborundum and Globar are registered trade-marks of and indicate manufacture by The Carborundum Company)

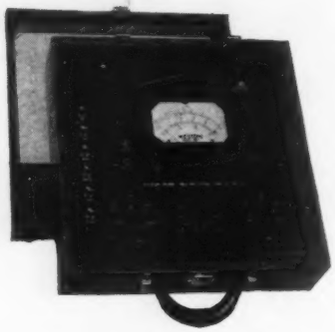
Working as we are today on new developments . . . especially on the design of special Electronic tubes, our engineers are experiencing a wealth of knowledge for future use in industrial applications.
Our engineers and scientists are constantly keeping ahead of today's fast moving pace in the field of electronics . . . when we again return to a peacetime basis this knowledge gained will be an all important factor in the production of the latest developments in equipment and tubes.
For military reasons, the tube illustrated is not a new development.
Raytheon Manufacturing Company
WALTHAM AND NEWTON, MASSACHUSETTS
DEVOTED TO RESEARCH AND THE MANUFACTURE OF TUBES FOR THE NEW ERA OF ELECTRONICS

Weston *Model 633*
A-C CLAMP AMMETER

—a real *time-saver,* which tests without disturbing circuits or interrupting work. The clamping jaws are simply placed over the conductor or switch blade for current reading.

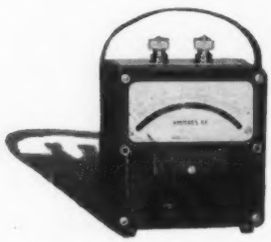
Industry's production figures bear testimony to the outstanding contribution electrical contractors and plant maintenance men are making to war-plant efficiency. Despite obstacles such as materials scarcities and limited manpower, electrical equipment—old and new—is being kept constantly fit for full scale output.

As part of the efficient maintenance combat team the WESTON test instruments illustrated—and others—are playing an important role. For in addition to their *trustworthy indications* on which maintenance has long learned to depend—they also provide features which greatly simplify preventative maintenance procedure. *In less time—at far lower cost*—industry's electrical equipment is being kept *fit* with dependable WESTONS.



Weston *Model 785*
INDUSTRIAL CIRCUIT TESTER

A highly versatile tester for trouble shooting. Provides voltage, current and resistance ranges for checking motor and control circuits, lighting circuits, sensitive relay circuits, electronic circuits, etc. (D-C sensitivity 20,000 ohms per volt.)



Weston *Model 430*
TEST INSTRUMENTS

The universal favorites for active maintenance . . . compact, rugged and with enduring precision. Large scale openings with hand calibrated mirror scales assure quick, accurate readings. Available in A-C and D-C instruments and single phase wattmeters.

Weston *Model 703*
DIRECT READING
ILLUMINATION METER

— measures all types of lighting direct, without correction factors—fluorescent, mercury vapor, incandescent, neon, daylight, etc. Made in models and ranges for shop and laboratory needs.

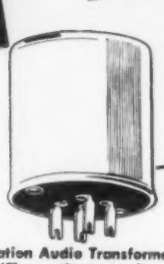
WESTON *Instruments*

Weston Electrical Instrument Corporation, 618 Frelinghuysen Avenue, Newark, New Jersey

THERMADOR TRANSFORMERS

THERMATITE TREATED

Defeat humidity and Extreme heat problems



Aviation Audio Transformer (Thermatite treated)

THERMADOR transformers are "THERMATITE" treated. THERMATITE is a process of accurate heat controlled vacuum impregnation, using the best grade of materials.

This process has been developed and improved by ten years of daily use by the same personnel and supervision.

THERMATITE impregnated transformers will therefore stand extreme conditions of climatic change. This is very important with their wide use all over the world.

EXPERIENCED ENGINEERS AT YOUR SERVICE

May we be of assistance in engineering and producing transformers to meet your specific requirements?

THE THERMADOR TRANSFORMER LINE

Included in the Thermador Transformer line are audio, auto, geophysical, bias supply, bridging, cathode modulation, coupling, driver, field supply, filament, high fidelity audio, input, midget plug-in audio, mixing and matching, modulation, output, plate, power (combined plate and filament), television, and tube-to-line transformers. Also manufactured are filters, chokes, and reactors (audio and equalizing).

"SEVEN LEAGUES AHEAD"

THERMADOR TRANSFORMERS

THERMATITE TREATED

THERMADOR ELECTRICAL MANUFACTURING CO.
5119 S. Riverside Drive, Los Angeles, Calif.

REPRESENTATIVES – Les Logan, 530 Gough St., San Francisco, Calif. • Verner O. Jensen, 2607 Second Avenue, Seattle, Washington • M. J. Klicpera, P.O. Box 3113, Houston, Texas.

RADIO SERVICE MAN OUT OF *Cairo*

Somewhere in Africa . . . or Iran, India, China . . . an American bomber returns to its base. Tomorrow, it will fly again . . . provided essential repairs are made tonight.

For this and numerous other such situations, BENDIX-RADIO Service Men are ever alert. Stationed at such centers as Cairo, Karachi and Kunming, within reach of advance bases of United Nations forces, these trained engineers are available at all times to render expert service.

Here on the home front, too, men and women of BENDIX-RADIO are doing their bit towards victory.

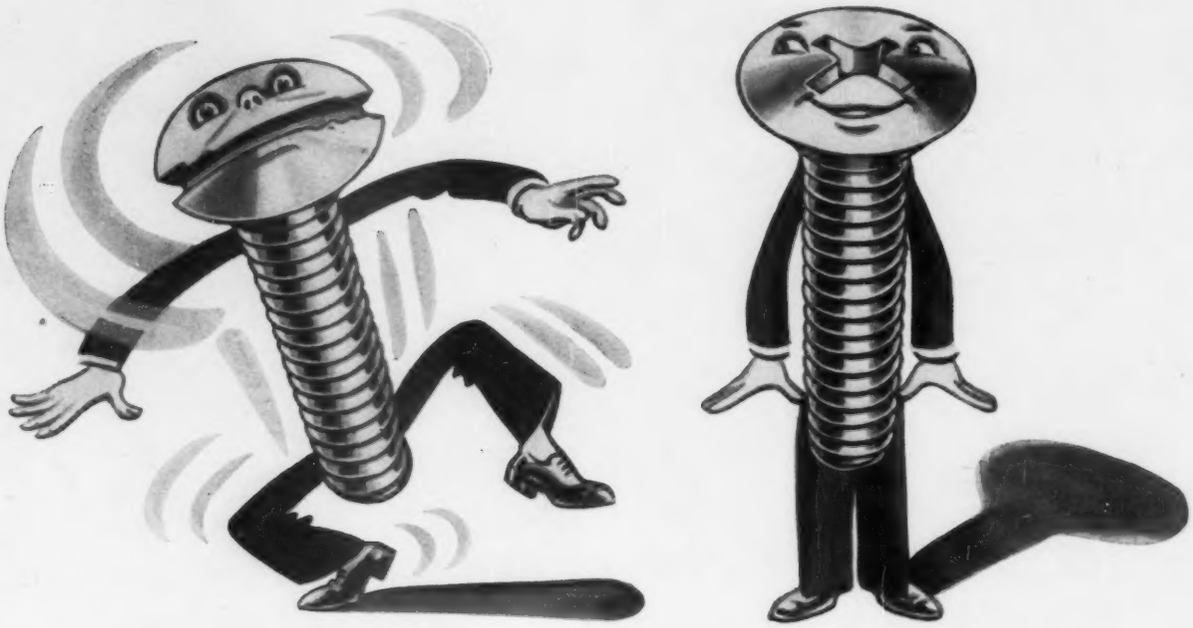
Products of BENDIX-RADIO are important members of "The Invisible Crew"... the precision instruments and equipment which 25 Bendix plants from Coast to Coast are speeding to our fighting crews on World Battle Fronts.

THE INVISIBLE CREW
Precision Equipment by Bendix
AVIATION CORPORATION

BENDIX RADIO

BENDIX RADIO DIVISION

Which is Your Choice . . . to Keep a Fastening TIGHT?



JIGGLING JERRY OR STAY-PUT PHIL?

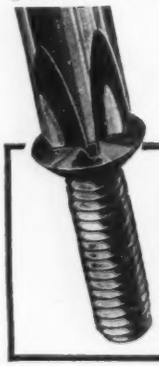
If your product is subject to vibration, Jiggling Jerry is *not* your man. Stay-put Phil, the one with the Phillips recessed head, is your best choice for a dependable grip. It can be set up tighter, and it will *stay* tight, despite vibration.

Then, too, the Phillips Recessed Head Screw gives you savings in assembly cost. The screw clings to the driver — the driver is self-centering in the recess — so the assembly man, with one hand free to hold the product, can work faster. He drives straight and sure — however awkward the position.

Power drivers can be freely used where, with slotted screws, it would be necessary to drive tiresomely by hand in order to avoid screwdriver accidents.

Added up, this often means an average 50% SAVING IN ASSEMBLY COSTS

Get Tighter Assemblies... Lower Assembly Cost with **Phillips RECESSED HEAD Screws**



WOOD SCREWS • MACHINE SCREWS • SHEET METAL SCREWS • STOVE BOLTS
SPECIAL THREAD-CUTTING SCREWS • SCREWS WITH LOCK WASHERS

Order stronger, cost-cutting Phillips from any of these sources

19 SOURCES of SUPPLY

American Screw Co., Providence, R. I.
The Bristol Co., Waterbury, Conn.
Central Screw Co., Chicago, Ill.
Chandler Products Corp., Cleveland, Ohio
Continental Screw Co., New Bedford, Mass.
The Corbin Screw Corp., New Britain, Conn.
International Screw Co., Detroit, Mich.
The Lamson & Sessions Co., Cleveland, Ohio
The National Screw & Mfg. Co., Cleveland, Ohio
New England Screw Co., Keene, N.H.
The Charles Parker Co., Meriden, Conn.
Parker-Kalon Corp., New York, N.Y.
Pawtucket Screw Co., Pawtucket, R.I.
Pheoll Manufacturing Co., Chicago, Ill.
Russell, Burdsall & Ward Bolt & Nut Co., Port Chester, N.Y.
Scovill Manufacturing Co., Waterbury, Conn.
Shakeproof Inc., Chicago, Ill.
The Southington Hardware Mfg. Co., Southington, Conn.
Whitney Screw Corp., Nashua, N.H.

Pressed—for time

AND TIME SAVED BY PRESSING

A customer needed a large quantity of these 7½-inch coil forms — in a hurry. The normal processing called for extruding, cutting-off, threading, drilling and other machining that would have made "on time" delivery impossible as all equipment necessary for these processes was tied up for months ahead.

We could have thrown up our hands and said "Sorry" We could have found plenty of alibis. But that is not our way.

Our Engineering Department went to work. "What about pressing?" asked someone. Pressing? A piece 7½ inches long with 52 holes and eight flutes and 52 threads on each flute? A stiff problem. It had not, to our knowledge, been done before.

"All right, let's try it!"

The die was probably the most complicated one that ever came out of our tool shop.

To make a long story short — we did it, and, pardon us for saying so, we are rather proud of this achievement.

If *you* have any special steatite problems, we would like to have a shot at them.

GENERAL CERAMICS AND STEATITE CORPORATION

KEASBEY, NEW JERSEY

GENERAL CERAMICS AND STEATITE CORPORATION STEATITE INSULATORS

3330

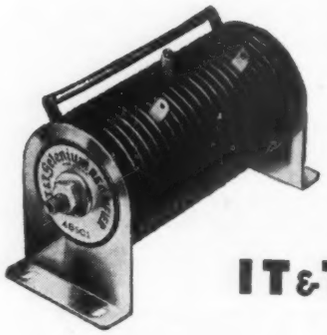
OFFICIAL U. S. NAVY PHOTO

Serving with the Navy of the Sky . . .

American planes are writing V for Victory in the skies. And with the Fleet Air Arm, as with other branches of the service which require direct current from an A. C. source; I. T. & T. Selenium Rectifiers are on the job.

Remarkably light in weight—compact—I. T. & T. Selenium Rectifiers are particularly suitable for aircraft use. They have no moving parts to wear out or cause failure at crucial moments. They operate over a wide temperature range and can be employed at extremely high altitudes.

Consulting engineering services available for specific requirements. Address Rectifier Division for descriptive bulletins.



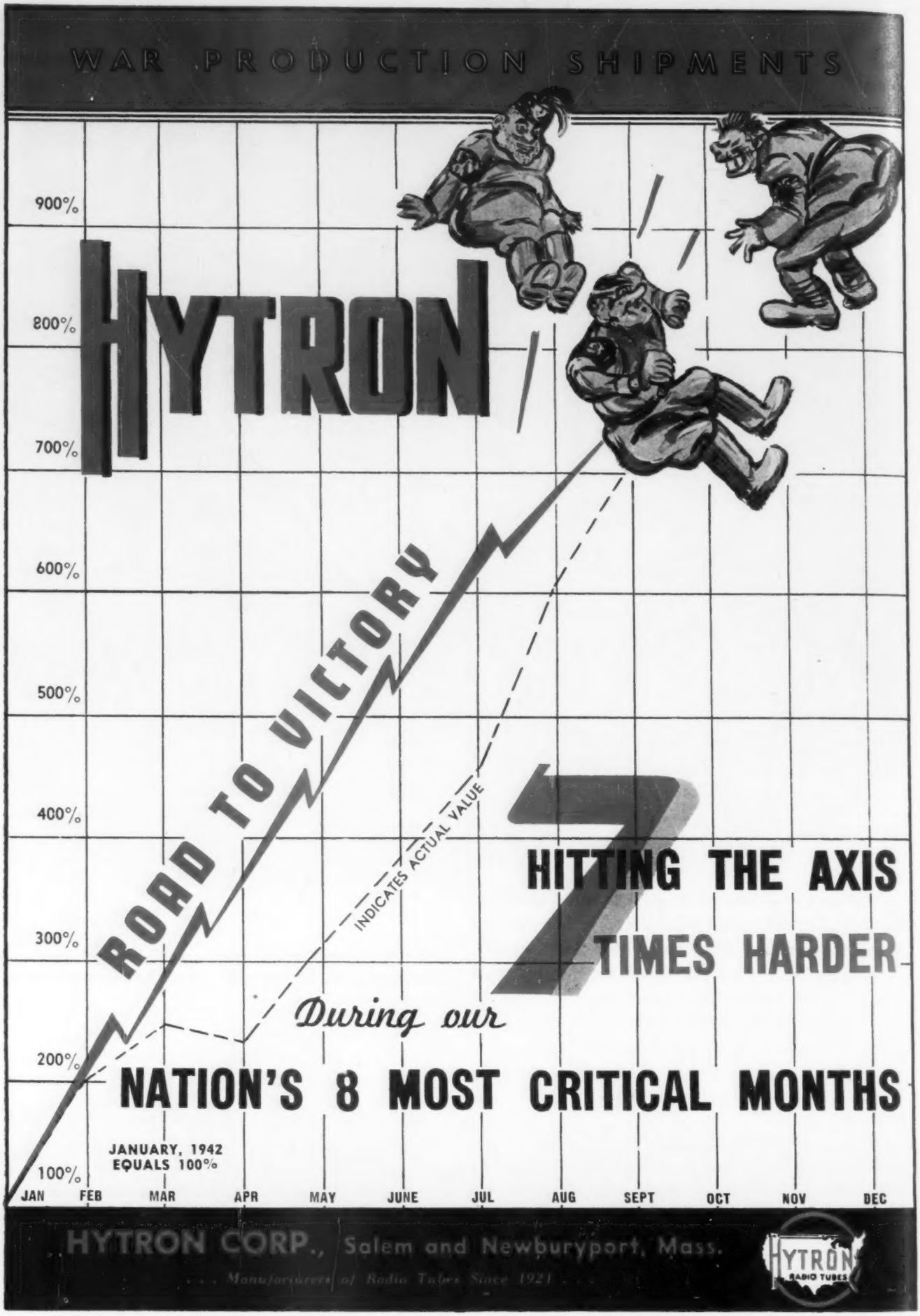
IT&T Selenium RECTIFIERS

Federal Telephone and Radio Corporation

Formerly INTERNATIONAL TELEPHONE & RADIO MANUFACTURING CORPORATION

AN IT&T ASSOCIATE

General Offices: 1000 Passaic Ave. East Newark, New Jersey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HYTRON
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INDICATES ACTUAL VALUE
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7 TIMES HARDER
During our
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EQUALS 100%
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HYTRON CORP., Salem and Newburyport, Mass.
. . . Manufacturers of Radio Tubes Since 1921 . . .
HYTRON
RADIO TUBES

Here was the job!

U. S. military gas mask lenses must be pear-shaped, dimensioned accurately to 1/64″, curved to meet exact specifications. Center panel thickness—.100″ minus .020″ plus nothing. Outer ⅛″ wide edge thickness—.090″ minus .010″ plus nothing. 5 Lumarith Plastic lenses to a sprue—no finishing necessary.

Would you have turned to the *Custom Molder?*

To manufacturers new to plastics, the most amazing thing about custom molders is that in one operation they convert raw material into a finished product. Modern production calls for fullest use of the important work of custom molders. Yet many manufacturers don't know how to avail themselves of this work, quickly and without confusion.

So as founder of the plastics industry, we undertake this program, in the hope it will help you find the right custom molder to execute any plastic part you may seek . . . and to speed your production from *start* to *finished* product. Here is what you do:

1. Tell us what qualities you want in the molded part—impact strength; resistance to water, acids or solvents; dielectric strength, etc., etc. We recommend the Lumarith Plastic that fits your specifications.

2. We put you in touch with the available custom molders best equipped to mold the piece.

3. The custom molder gives you a quotation.

4. We work with the molder in furnishing the formulation of the Lumarith Plastic selected, that suits all factors of production technique . . . in relation to dies, heat, pressure, etc.

We welcome your inquiries and questions.

LUMARITH *Plastics*
REG. U.S. PAT. OFF.

Lumarith Molding Powders (Cellulose Acetate)
Lumarith E. C. Molding Powders (Ethyl Cellulose)

CELANESE CELLULOID CORPORATION, *a division of Celanese Corporation of America*, 180 Madison Avenue, New York City. *Representatives:* Dayton, Chicago, St. Louis, Detroit, San Francisco, Los Angeles, Washington, D. C., Leominster, Montreal, Toronto.

CELANESE CELLULOID CORPORATION

the first name in plastics

PIONEERS...in war and peace

GAMMATRON BUILT THE FIRST TANTALUM TUBE

Heintz and Kaufman engineers designed the first tantalum tube in 1928 to provide the ruggedness and reliability needed in marine transmitters. Today nearly 30 Gammatron types, with power ratings from 50 to 5000 watts, are engaged in handling America's wartime communications.

By now tantalum is recognized as the ideal element for plates and grids. It has the lowest gas content of all metals, gives up this gas readily during the pumping process, and then acts as a powerful absorbent for any gas released during operation.

Tantalum construction explains the remarkable ability of Gammatron transmitting tubes to withstand tremendous overloads without producing free gas which would cause filament emission failure.

Our electronic engineers are now pioneering remarkable new types of tantalum tubes for the service of America at war . . . and some day for the world at peace.

HK-1054
MAXIMUM POWER OUTPUT
3000 WATTS

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GAMMATRONS...OF COURSE!

Yes!

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BANANA ~~X~~ Pins

Yes! We have plenty of banana pins in many types and sizes. And they are available for prompt delivery. As made by Ucinite these pins protect vital radio connections against the jolts, jars and jounces of mobile connections in tanks, jeeps, walkie-talkies, field sets, etc. etc. You can count on them to *keep contact!*

THE UCINITE COMPANY

459 Watertown Street, Newtonville, Mass.

DIVISION OF UNITED-CARR FASTENER CORP.

Awarded

TO THE MEN AND WOMEN OF

CONNECTICUT TELEPHONE & ELECTRIC CORPORATION

★ MERIDEN ★★ CONNECTICUT ★

FOR DOING THEIR DUTY AS THEY SAW IT

We, the men and women of "Connecticut", shall fly our burgee and wear our "E" pins with a deep sense of pride. We have done what it is every American's duty to do: our all-out best. The "E" will be an inspiration to find ways of doing still better. The communications equipment and precision electrical products we are privileged to manufacture have direct and important military assignments. We undertake that our output shall not be less by a single unit than the maximum of which we are capable.

The SPRING that WINDS ITS TAIL on ITS BODY

A BOOK HITLER WOULD LIKE TO SUPPRESS
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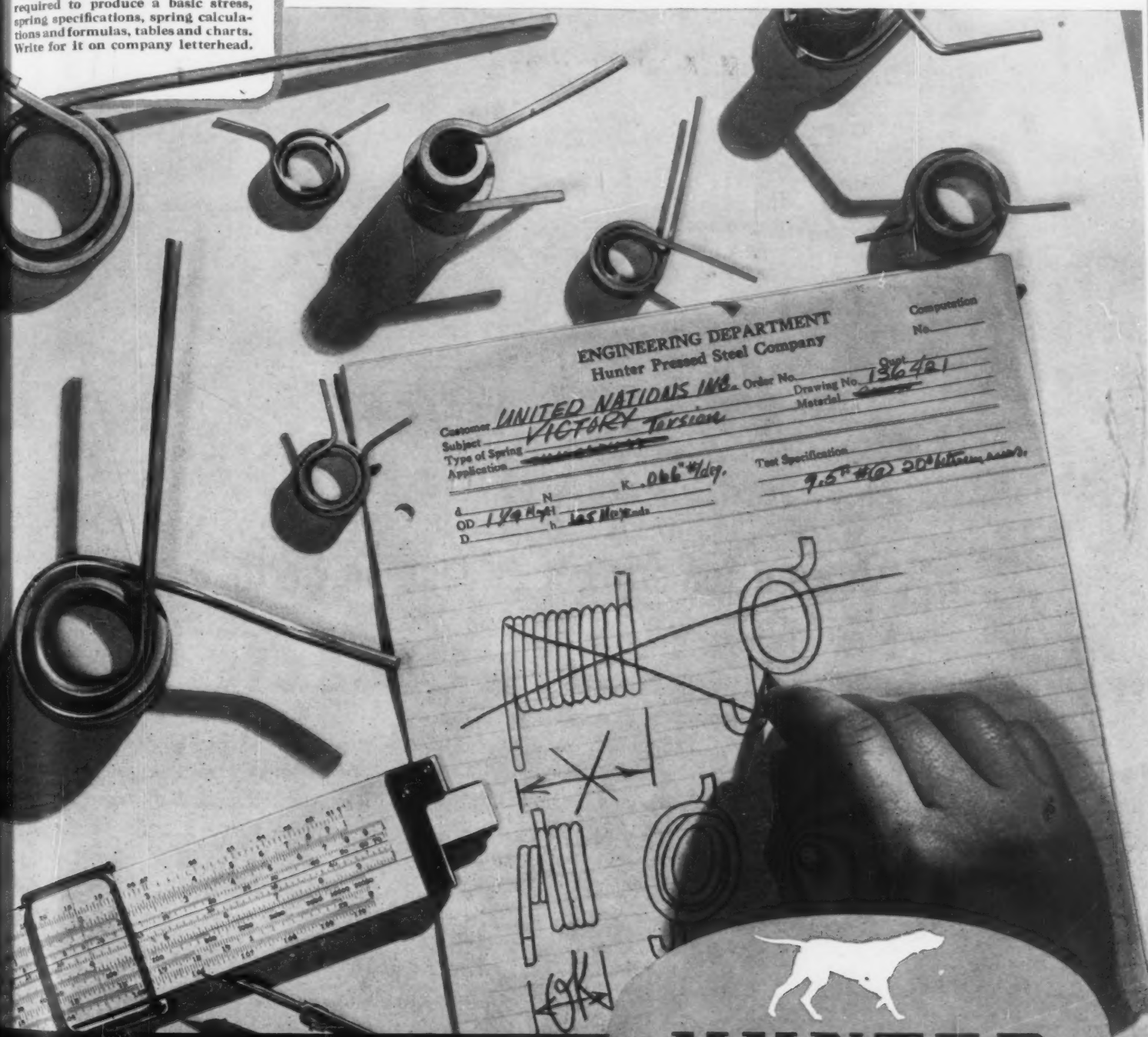
SCIENCE IN SPRINGS . . . 40 pages about springs, carefully culled from our master data. Design procedures for springs, the "spring chart" for determining the load and deflection required to produce a basic stress, spring specifications, spring calculations and formulas, tables and charts. Write for it on company letterhead.

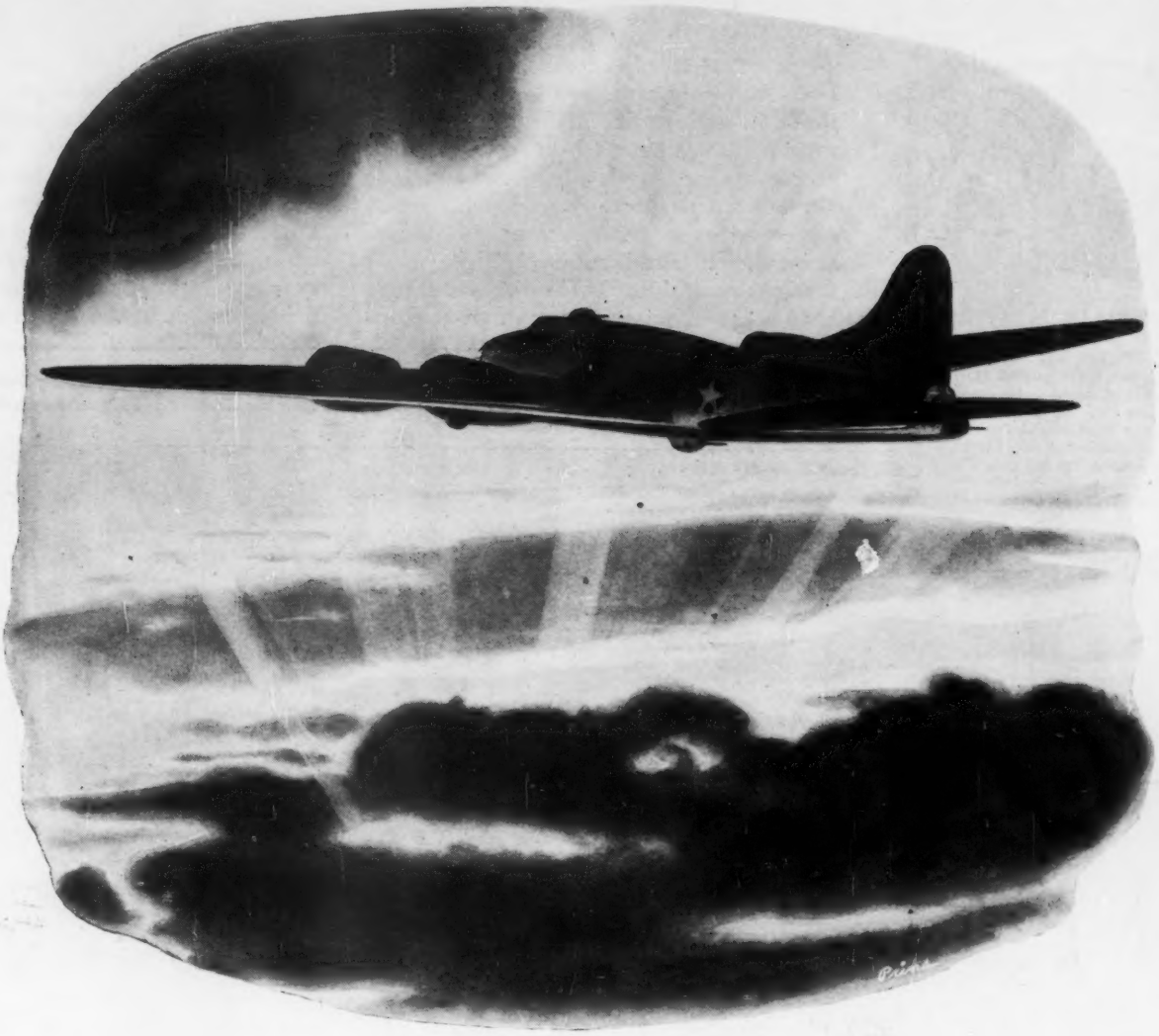
AT TIMES only a torsion spring will do. And only a unique torsion spring at that . . . such as one of the "double-coil" torsion springs below. You see, to achieve proper spring length where the retaining pin or shaft is short, these double springs are coiled over themselves like thread on a spool. Their advantages? Well, apart from their suitability to close quarters, they have other advantages over single-coil torsions, notably—stress is lower, or force is greater, or deflection is greater—assuming that the other two of the three factors are fixed in value. Then again, the double coil inspires a variety of pin locations to avoid interference. . . . Why do we point all this out? Simply to indicate the complexities of spring design and specification. There is only ONE right spring for the job—the one made possible by science in springs.

IN THE ARMY NOW . . . *Springs have gone to the front in a number of ways Hitlerito and his Nipponazis would like to know. If you need springs for fighting equipment, our men will be only too glad to make them or design and make them. Just say when!*



HUNTER
Science in Springs

HUNTER PRESSED STEEL COMPANY, LANSDALE, PENNA.



Toward Tomorrow's "Peace on Earth"

● Today a single purpose moti-
·tes the people of Sylvania. That
·lp win the war.

we must pause to
for your patri-
ˡ sacrifice.
·ou in
ˡr

ress. Tremendous strides are being made in secret naval navigation and military communications projects in our laboratories and plants. Radio and electronic tubes, perfected for war production, will open a new era of radio and television in the peace to come.

So while our minds and hands work only toward victory, our hearts and eyes look ahead to brighter days—toward Tomorrow's "Peace on Earth."

SYLVANIA ELECTRIC PRODUCTS INC.

Formerly Hygrade Sylvania Corporation

EMPORIUM, PA.

ˡ amps, Fluorescent Lamps and Fixtures, Radio Tubes, Electronic Devices

s to h

At this season
express appreciation
otic understanding and
The experience of serving y
the past prepared us for war. Ou
war service will help you win the
peace.

sharpen scientific
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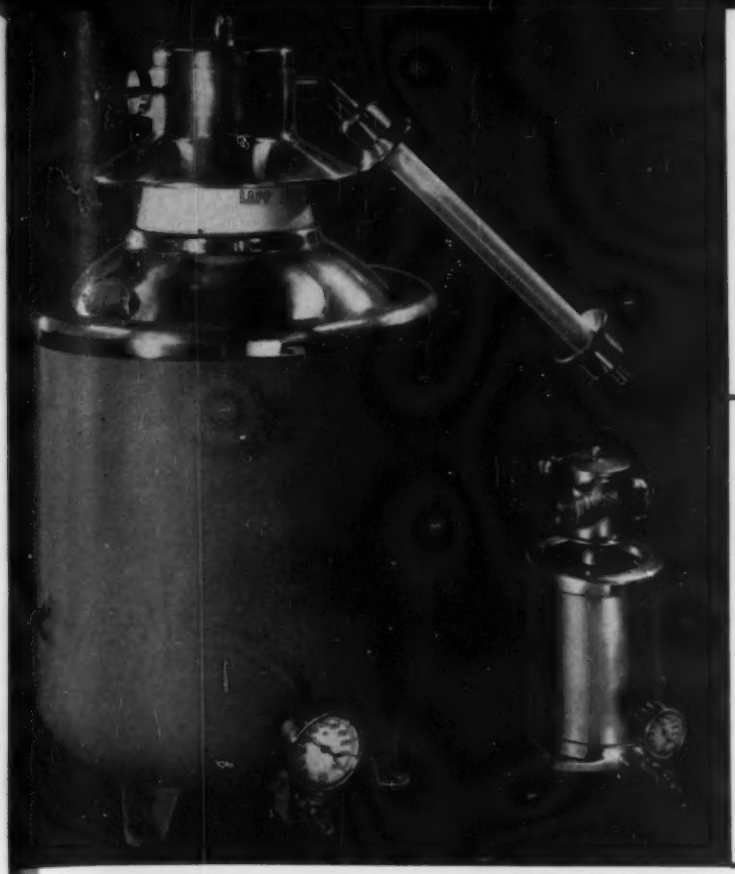
Incandescent L



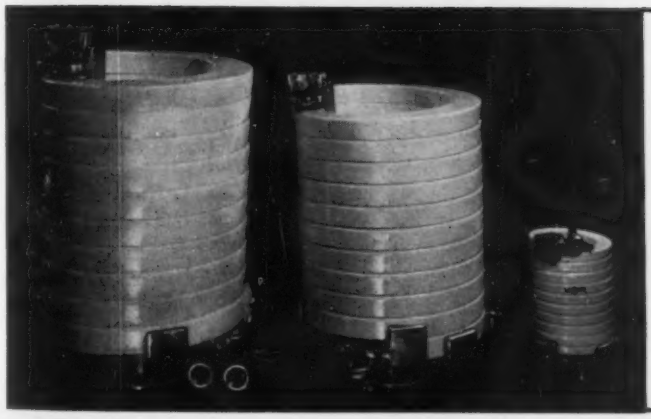
FOR HIGH-FREQUENCY POWER SOURCES

LAPP GAS-FILLED CONDENSERS

In any electronic circuit, wherever lump capacitance is needed, Lapp condensers will save space, save power and save trouble. Available for duty at almost any conceivably-useable voltage rating and capacitance, they bring to any application notable mechanical and electrical advantages: practically zero loss, smallest space requirement, non-failing, puncture-proof design, constant capacitance under temperature variations. *Shown, at left, Unit No. 25934, rated at 200 amp., 6500 volts, capacitance variable 4300 mmf. to 11000 mmf.; right, Unit No. 23722, rated at 50 amp., 7500 volts, capacitance 45 mmf. to 75 mmf.*

STANDOFF, BOWL, ENTRANCE INSULATORS

Standoff, bowl, entrance and other special-purpose insulators are available in wide range as standard Lapp catalog items. Other insulators of special design are easily produced by Lapp methods, either in porcelain or steatite. The wide choice of such insulators available from Lapp simplifies the design of high-frequency equipment. Also, Lapp is equipped for production of many special assemblies, of porcelain or steatite, and the associated metal parts.



LAPP PORCELAIN WATER COILS

For cooling of high-frequency tubes in radio transmitters and other electronic power sources, Lapp porcelain water coils have been widely used. With nothing about the porcelain to deteriorate, sludging is eliminated, and with it the need for cleaning and water changes. Porcelain pipe and fittings in any needed size are also available as catalog items. We welcome inquiry on any Lapp equipment for experimental or industrial electronic application.

Lapp INSULATOR CO., INC.

LEROY, N. Y.

ARMY E NAVY

5 REASONS WHY *Rimlocks are first* for quartz cutting operations

1 FAST, COOL CUTTING

Rimlocks consistently outperform in speed. They cut faster and freer because thousands of diamonds are held in radial position—presenting their sharpest edges to the quartz piece.

2 LONG LIFE

Rimlocks last longer because a full measure of diamonds is tightly locked in the wheel rim without crushing. Crushing causes eventual movement and loss, with consequent lowered life. This special bonding process* is exclusive to Rimlocks and is the latest DI-MET development in diamond cut-off wheels.

3 UNIFORMITY

Rimlocks are uniform in quality and cutting ability. An identical quantity of carefully graded diamond grit is individually weighed and hand loaded into each wheel. Diamonds are firmly packed to the very bottom of every notch, then bonded by the new Rimlock process.

*PATENT APPLIED FOR

4 ENGINEERED ESPECIALLY FOR QUARTZ

Rimlocks are designed specifically for quartz cutting by selecting the proper diamond size and controlling the width of kerf. Choice of a hard, fast action or a softer, more feathery touch may be had simply by specifying Steel Rimlock or Copper Rimlock. Each has its advantages depending upon the type of cutting preferred.

5 SURFACE CHARACTERISTICS

Rimlock's superior stiffness, uniform diamond size, rigid bonding and extremely fast, free and cool cutting all combine to produce an excellent, smooth surface finish of high accuracy and parallelism. This is particularly true when used on the Felker DI-MET Quartz Cutting Machine with Hydraulic Retardant.

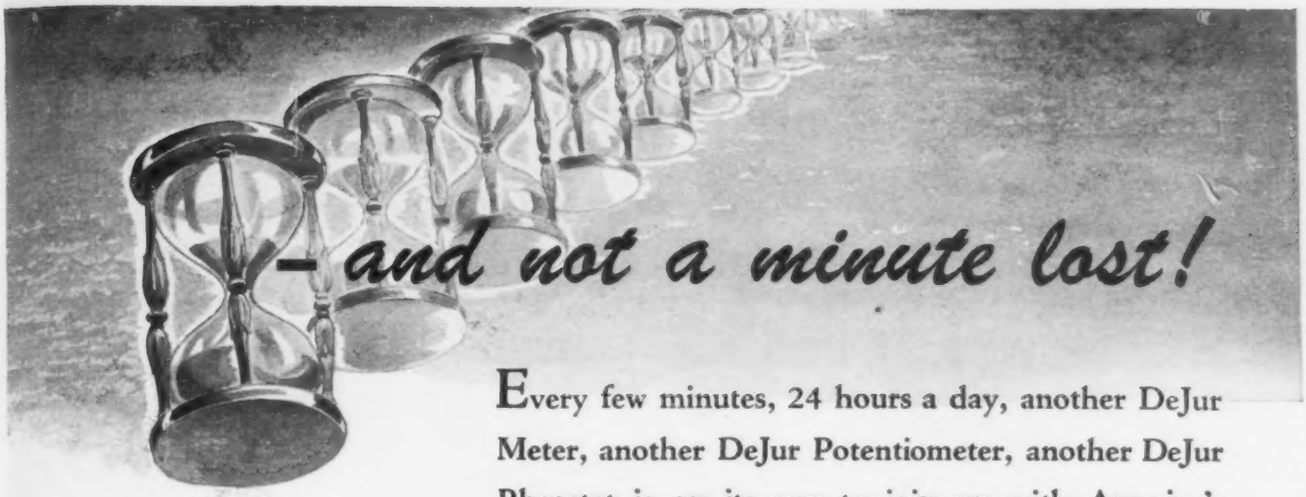
SPECIFY *Rimlock*

If you're interested in longer blade life, faster cutting, constant uniformity and excellent surface quality, there's one sure answer—choose RIMLOCKS!

FELKER MANUFACTURING COMPANY
BOX 208, TORRANCE • CALIFORNIA

FELKER DI-MET

MANUFACTURERS OF DIAMOND ABRASIVE WHEELS



— and not a minute lost!

Every few minutes, 24 hours a day, another DeJur Meter, another DeJur Potentiometer, another DeJur Rheostat is on its way to join up with America's fighting forces on land and sea and in the air.

Here is as thrilling a story as any that American industry has recorded so far. A dramatic merger of men, mind and materials... an overnight swing from peacetime pursuits to wartime speed-up, and not a single minute lost . . . a transition from normal working habits in a small Connecticut town to never-ending production which is reflected wherever the flag flies.

Out of all this—with your help and ours—will come final victory. Equally important, will come new developments, new discoveries that will far transcend anything in the past.

Write, wire or phone for New Catalog 1-61, Dept. G

DeJur

Precision

METERS · RHEOSTATS
POTENTIOMETERS

ELECTRICAL DeJUR U.S.A. INSTRUMENTS

DeJur-Amsco Corporation

Shelton, Connecticut

Manufacturers of Meters, Rheostats, Potentiometers and Other Precision Electrical Instruments

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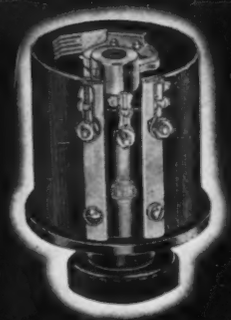
BUY WAR BONDS & STAMPS!



DeJur Potentiometer
Type 270

DeJur Milliammeter
Model 310

"Taking it" . . . together

Communications...are key factors in every movement and action of the tank in combat. Orders must be received and sent right through a tortuous mixture of mechanical noise and artillery thunder . . . and these orders *must get through!* Time, at such moments is precious as life and RAULAND short-wave equipment is *Electroneered* to meet Uncle Sam's demand that communications for tanks be as "tough and dependable as the tank itself." They must have "the stuff" to stand up under all the shocks and hard treatment sustained in battle action.

To make RAULAND communication transmitters even more dependable, only RAULAND *Electroneered* tuning condensers are used. They are designed and built to minutely controlled variations and a fine degree of tuning . . . and this is maintained through the roughest periods of tank maneuvers and battle operations.

• *Electroneering* is our business •

Rauland

RADIO — SOUND — COMMUNICATIONS

The Rauland Corporation . . . Chicago, Illinois

Buy War Bonds and Stamps!...Rauland employees are all doing their part as members of the 10% savings club.

MASTER MULTITESTER

A. C. & D. C. VOLTMETER • D. C. AMMETER • CAPACITY & INDUCTANCE METER

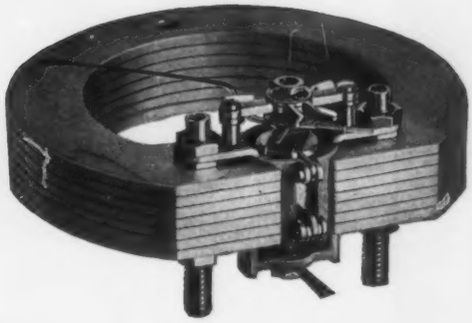
The original engineering design features of this precision Master Multi-tester makes it ideal for a large variety of tests in both the laboratory and factory. Incorporates the exclusive R.C.P. system of A.C. measurements eliminating the troublesome copper oxide rectifier. Rectifier used is rugged, extremely sensitive and easily replaced. A.C. scales are practically linear and coincide with D.C. scales. Capacity measurements are direct reading. Ohmmeter has self-contained power supply. Meter sensitivity 2000 ohms per volt. D.C. voltmeter range: 0-5-50-250-2500-5000. A.C. voltmeter range: 0-10-100-500-1000-5000. D.C. milliampere range: 0-10-50-250-1000. D.C. ammeter range: 0-1-5-25. Capacity meter range: 0-.03-.3-3-30-300 mfd. Low ohm scale: 0-100. Center ohmmeter scale range: 0-15,000-150,000. Megohm scale: 0-.1-.5-15. Inductance meter: .25-1000 millihenries — .25-100-1,000-10,000 henries. Meter and power line completely fused. Supplied in handsome, black crackle wear-resistant steel case. Operates on 105-135 AC. Model 414 V-7 ready for operation . . . $36.95.

Other instruments in the complete line of R.C.P. electronic and electrical test instruments described in catalog No. 126. If you have an unusual test problem — either for production line or laboratory work — our engineers will be happy to cooperate in finding the most efficient and economical solution.

RADIO CITY PRODUCTS COMPANY, INC.

127 WEST 26th STREET — **NEW YORK CITY**

MANUFACTURERS OF PRECISION ELECTRONIC LIMIT BRIDGES – VACUUM TUBE VOLTMETERS – VOLT-OHM-MILLIAMMETERS – SIGNAL GENERATORS – ANALYZER UNITS – TUBE TESTERS – MULTI-TESTERS – OSCILLOSCOPES – AND SPECIAL INSTRUMENTS BUILT TO SPECIFICATIONS



It's the movement that counts

IF you want to find out how accurately, and for how long, an instrument will *do* its work, you've got to examine the part that *makes* it work.

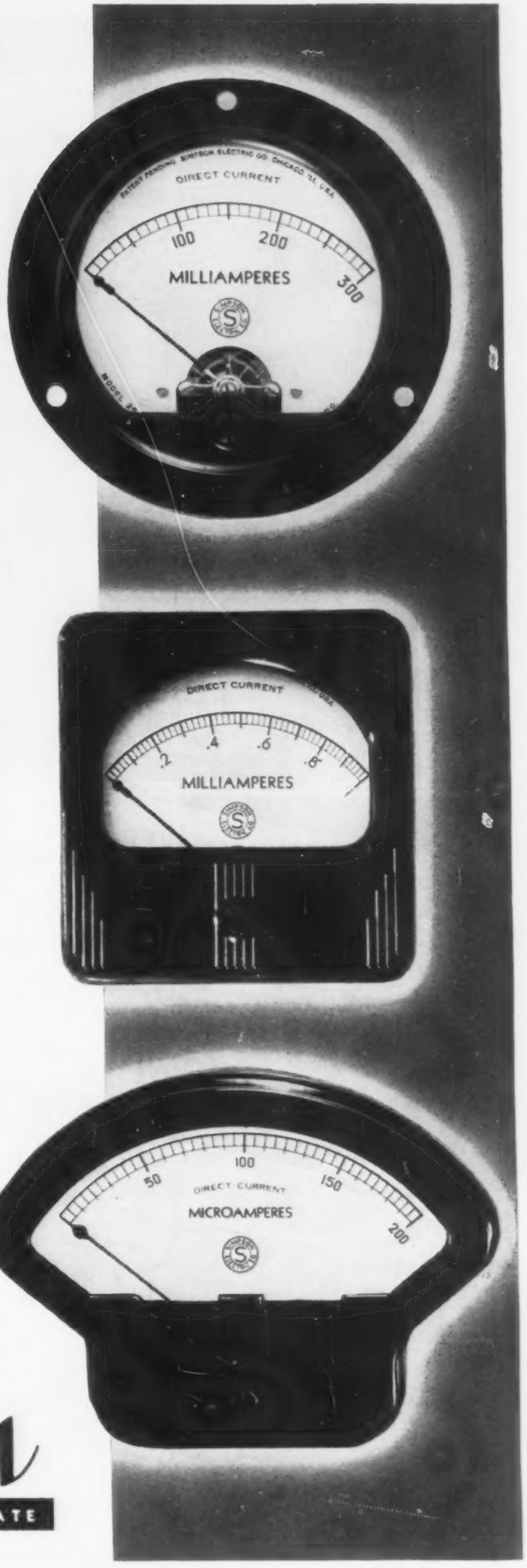
In every Simpson Instrument this basic operating mechanism is a movement which incorporates both full bridge construction and soft iron pole pieces. There is nothing new about this type of design. It has been recognized for many years that such a movement is more accurate, more rugged, and more expensive, . . . *but*—

—there is something entirely new in the patented Simpson expression of this design. For out of the long experience in instrument-making on which the Simpson organization is founded, there has been developed a movement which offers this better design in its best form, and which permits substantial economies through standardization and straight line production.

If your need for instruments is vital enough to give you the right to buy, it is vital enough to rate the best. To those who have searched out the facts, best means . . . Simpson.

MODEL 260
High Sensitivity Tester

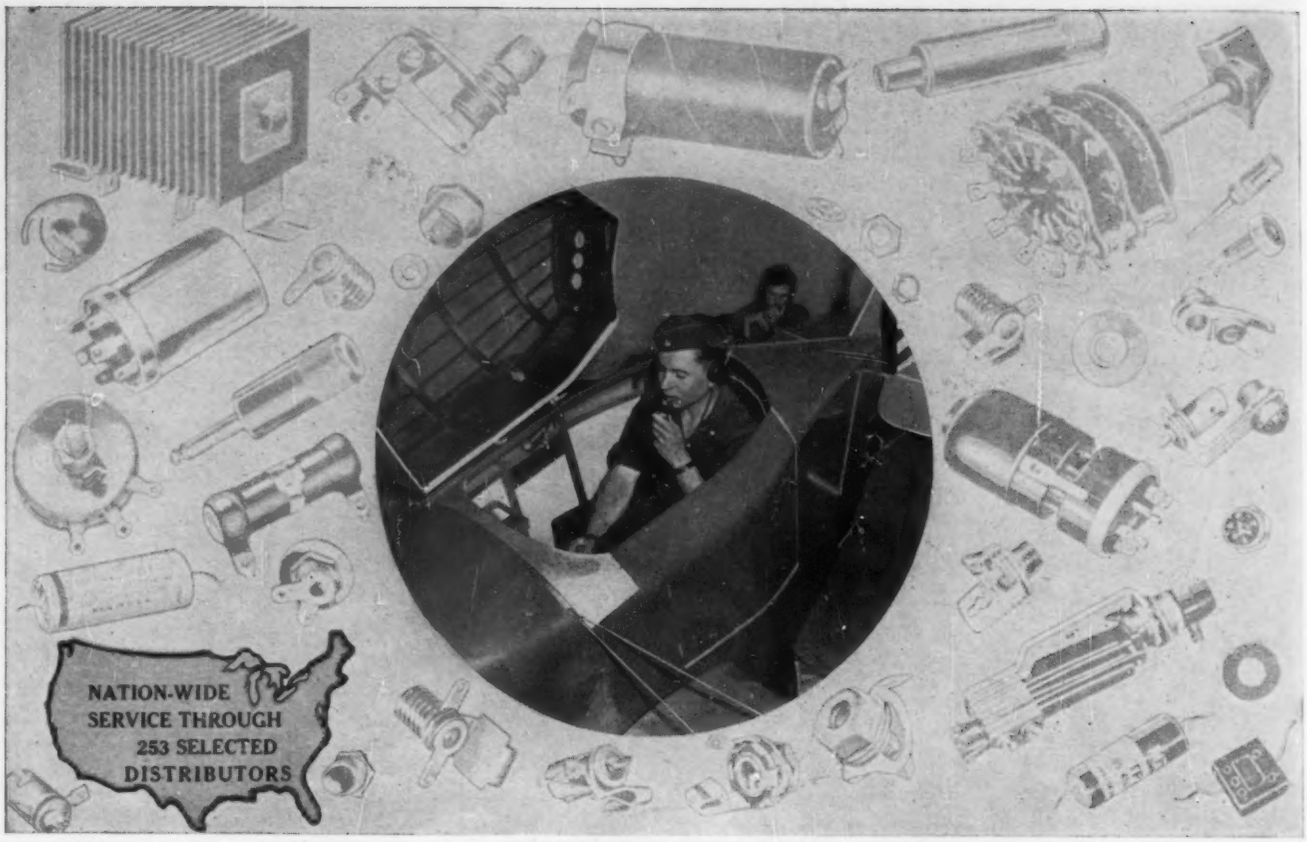
A typical example of Simpson leadership. Ranges to 5,000 volts, both AC and DC, at 20,000 ohms per volt DC, and 1,000 ohms per volt AC. Current readings from 1 microampere to 500 milliamperes. Resistance readings from ½ ohm to 10 megohms. Five decibel ranges, —10 to +52 DB.



SIMPSON ELECTRIC CO.
5200-5220 Kinzie St., Chicago, Ill.

Simpson

INSTRUMENTS THAT STAY ACCURATE



OFFICIAL PHOTOGRAPH, U. S. ARMY AIR CORPS

Mallory Approved Precision Products Keep Him "Flying"... 300 Miles an Hour Sitting Still!

When he pulls down the hood of this Link Instrument & Radio Pilot Trainer, the flier at the controls acts just as if he were in actual flight over fog-bound or blacked-out terrain. He has to rely on a panel of flight instruments and on his radio earphones to guide him to his "objective"... at 300 miles an hour sitting still!

To keep Uncle Sam's airmen learning in Link Trainers, several Mallory precision products are used. Potentiometers to control the volume of simulated radio signals—themselves selected by Mallory selector switches. Rheostats for cockpit lights; pilot light assemblies; and push button switches to control signal lights. Phone plugs and jacks for both instructor's and student's microphones and head phones. Thus the communications and navigation of a Link Trainer... just like similar systems in actual fighting planes... depend on Mallory parts.

Perhaps *you* are in the market for precision parts for some device you plan to manufacture. Maybe you need a replacement part for present plant equipment... or an electronic element for laboratory or testing apparatus. If so, you'll want to investigate Mallory Approved Precision Products, the choice of leading engineers in the aeronautical, automotive, geophysical, electrical, radio and other industries.

It's easy to get the Mallory parts you need *promptly*. Just call your nearest Mallory Distributor. Ask him, or write to us, for a copy of the latest Mallory Catalog. Use this book as your buying guide... and depend on your Mallory Distributor as your source of supply. He has the experience and ability to help speed and simplify your purchasing.

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APPROVED
PRECISION PRODUCTS

Write today for this catalog and the name of your nearest Mallory Distributor

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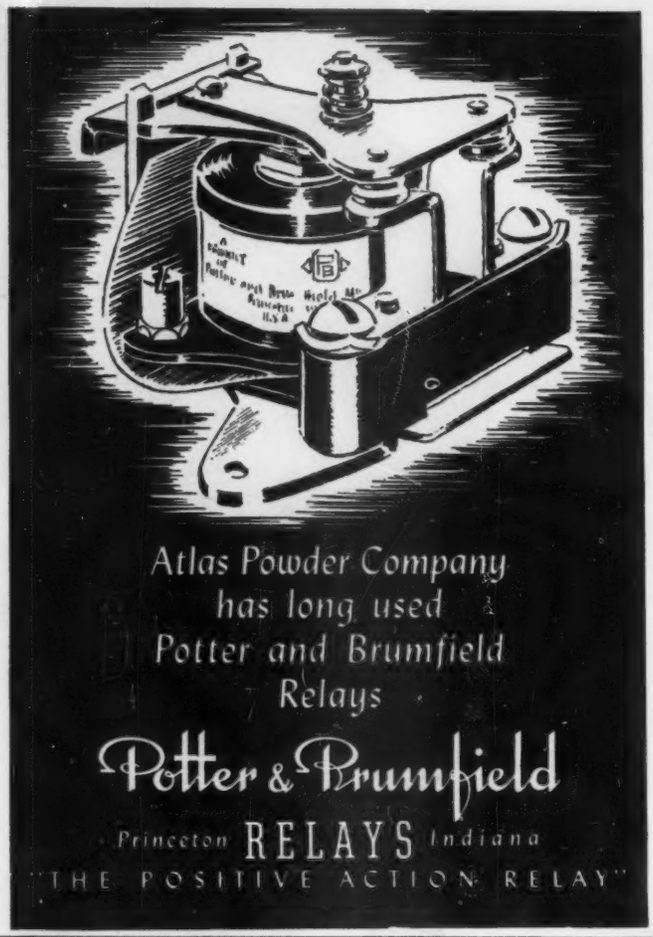

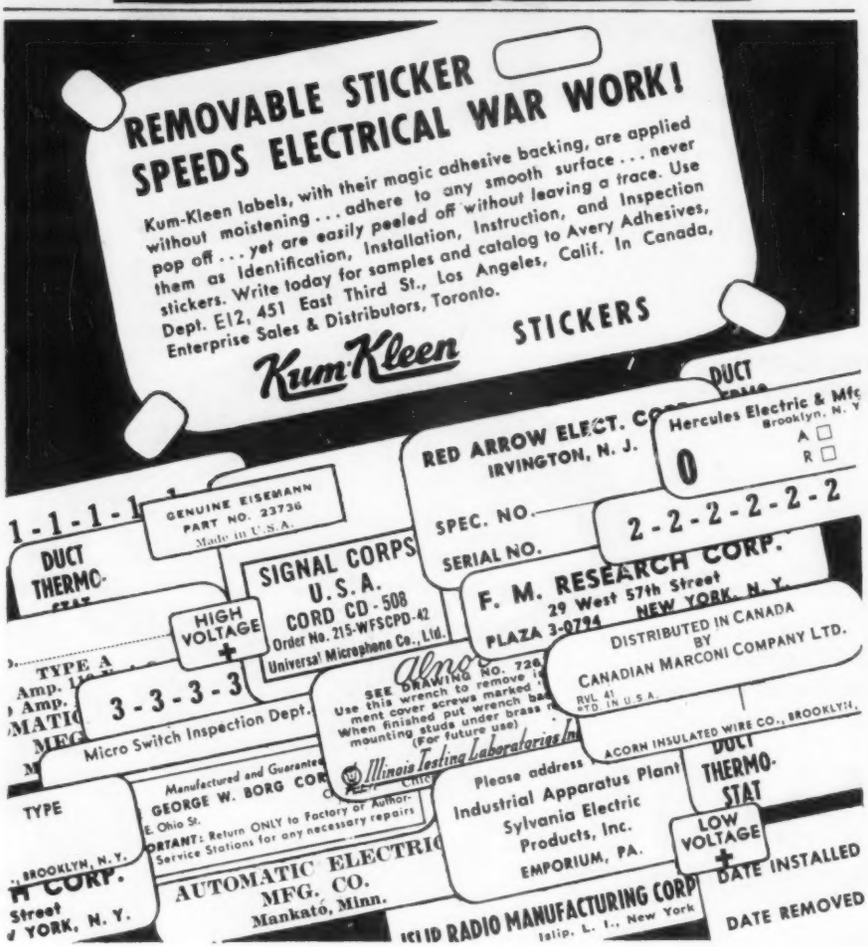

ALLEGHENY LUDLUM STEEL CORP.
(Two plants)

BELMONT RADIO CORP.
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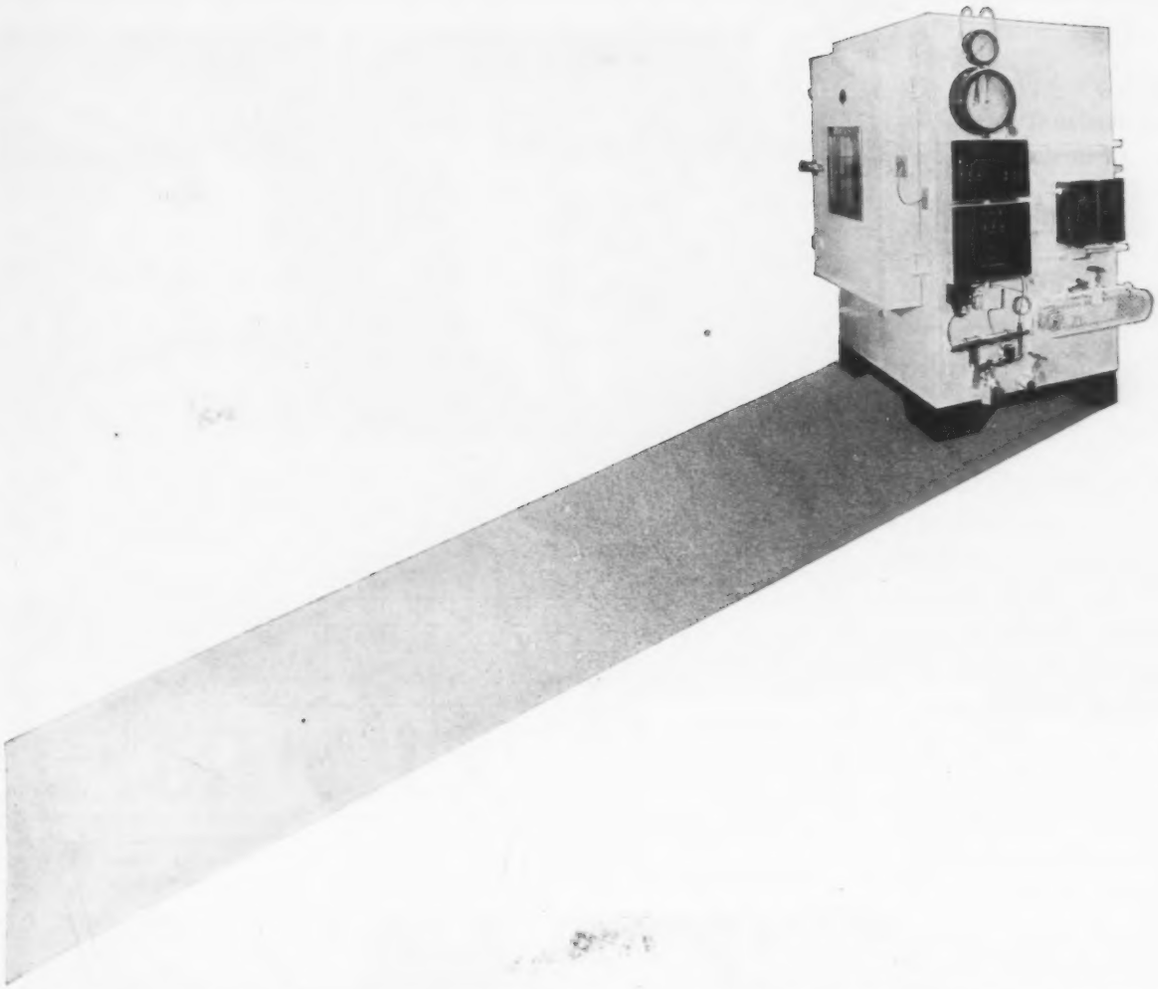
SUMMERILL TUBING CO.
Bridgeport, Pa.

SYLVANIA ELECTRIC PRODUCTS, INC.,
Emporium, Penna.

S. S. WHITE DENTAL MANUFACTURING CO.
Staten Island, N. Y.

Rauland Corp. Acquires American Rights to British Patents

THE RAULAND CORP. OF Chicago has acquired the American interests and patents of the Gaumont-British Picture Co. of America, Cinema-Television, Ltd., and Baird Television and also the American rights of all present and future patents of the Gaumont-British Picture Corp., Ltd. of London in the fields of television, electronic tubes, and photoelectric devices. Rauland has taken over in its entirety the laboratory and engineering staff as well as the equipment of the first-mentioned three companies.



TESTING the stamina of materials and instruments in the "Tenneyzphere" High Altitude Chamber removes the last vestige of guesswork.

Standard range of temperatures run from —40° to 150° Fahrenheit. (Special units test from —90° to 320° Fahrenheit.)

Observation ports permitting full visibility are sealed to prevent interior condensation. The interior is scientifically air-conditioned.

To make mechanical adjustment of the apparatus under test, small rotating shafts are installed. These are manually turned from the outside and studs extend through suitable packing to keep them airtight.

These cabinets meet the test requirements of all U. S. Government Agencies: Army Signal Corps, Navy Bureau of Aeronautics, National Advisory Committee for Aeronautics.

For illustrated booklet describing "Tenneyzphere" High Altitude Chambers, Constant and Variable Temperature Baths, Humidity Chambers, and All-Weather Rooms, with tables giving specifications for many important installations write Dept. E-12.

TENNEY ENGINEERING INCORPORATED

TENNEY ENGINEERING, INC.

8 ELM STREET, MONTCLAIR, N. J.

2 *small* POWER RELAYS

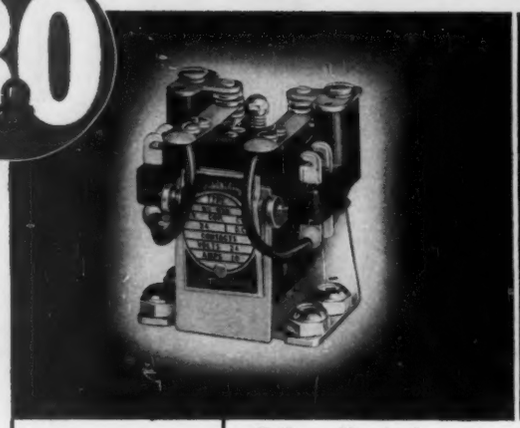
PROVEN BY TWO YEARS UNDER THE FIRE OF EXPERIENC
ACCEPTED FOR THEIR DEPENDABLE & UNWAVERING PERFORMANC

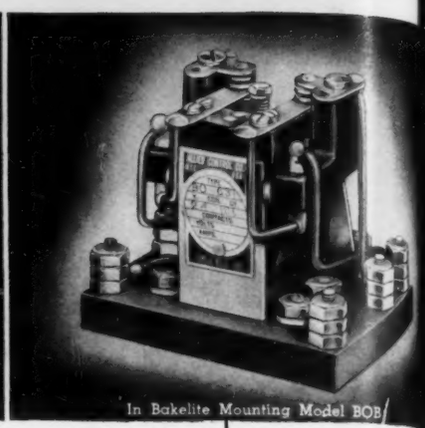
BO

BO and BJ power relays meet every known requirement for flight, firing and communication control.

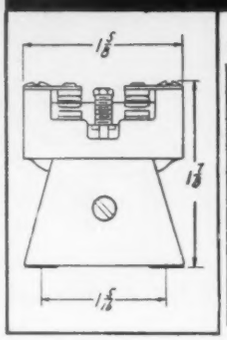
BO and BJ are Relay Veterans. They have seen two years on the firing line of experience . . . on the sea . . . in the air . . . and on land. They have proven themselves durable and completely dependable.

BO and BJ have semi-balanced armatures which require minimum wattage to withstand shock and vibration up to 12 G . . . they operate at temperatures of 120 plus or 50 minus . . . they are corrosion resistant beyond specifications . . . their weights are significantly low . . . their dimensions are minute . . . their double pole double throw design permits abundant contact arrangements . . .

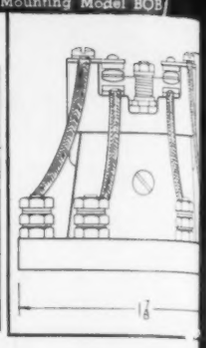




In Bakelite Mounting Model BOB

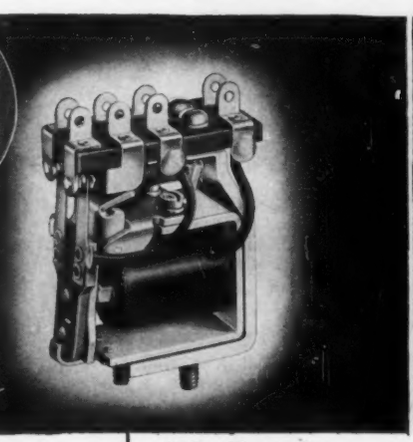


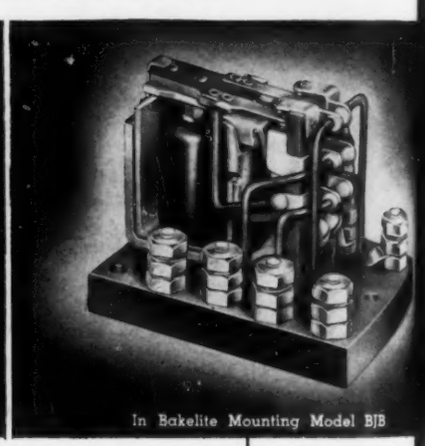
Coil Number	Nominal Volts	Amperes	Resistance	Watts
28	5.0	.500	10.0	2.5
29	6.0	.422	14.2	2.5
30	7.8	.319	24.5	2.5
32	13.2	.190	70.0	2.5
33	15.4	.162	95.0	2.5
34	20.	.125	160.	2.5
35	24.	.106	230.	2.5
36	32.	.078	415.	2.5
38	50.	.049	1024.	2.5
42	112.	.022	5000.	2.5



The above coil data is based on continuous duty at nominal operating voltages. Coils are impregnated to withstand humidity and salt spray. Bakelite parts are molded. Contact arrangement D.P.S.T. Double break normally open or closed and D.P.D.T. Contact rating non-inductive 15 amperes for 12 and 24 volts D.C. and 110 volts A.C.

BJ

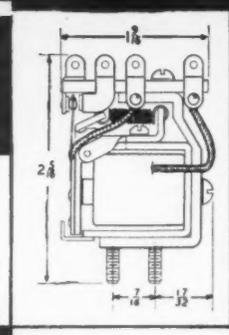




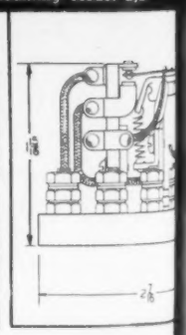
In Bakelite Mounting Model BJB

. . . and they are
INTERCHANGEABLE
. . . variations in the mounting base can be made to make this relay widely interchangeable

BO and **BJ** are ***Accepted*** and ***Approved*** **RELAYS**



Coil Number	Nominal Volts	Amperes	Resistance	Watts
24	1.61	1.243	1.293	2
26	2.56	.8003	3.270	2
28	4.07	.4918	8.267	2
30	6.47	.3093	20.90	2
32	9.92	.2017	49.16	2
34	15.0	.1332	112.6	2
36	25.4	.0786	323.5	2
38	39.5	.0506	780.6	2
40	59.6	.0339	1738.	2
42	86.3	.0232	3725.	2



The above coil data is based on continuous duty at nominal operating voltages. Coils are impregnated to withstand humidity and salt spray. Bakelite parts are XXXP laminated wax impregnated. Contact arrangement D.P.S.T. Double break normally open or closed and D.P.D.T. Contact rating non-inductive 5 amperes for 12 and 24 volts D.C. and 110 volts A.C.

ALLIED CONTROL

COMMUNICATIONS
...directing arm of combat

This battle drawing was prepared with the aid of Army and Navy authorities.

IN modern battle, our fighting units may be many miles apart. Yet every unit, every movement, is closely knit into the whole scheme of combat—through communications.

Today much of this equipment is made by Western Electric, for 60 years manufacturer for the Bell System.

Here are some examples of communications in action.

1 Field H.Q. guides the action through field telephones, teletypewriters, switchboards, wire, cable, radio. Back of it is G. H. Q., directing the larger strategy . . . also through electrical communications. The Signal Corps supplies and maintains all of this equipment.

2 Air commander radios his squadron to bomb enemy beyond river.

3 On these transports, the command rings out over battle announcing system, "Away landing force!"

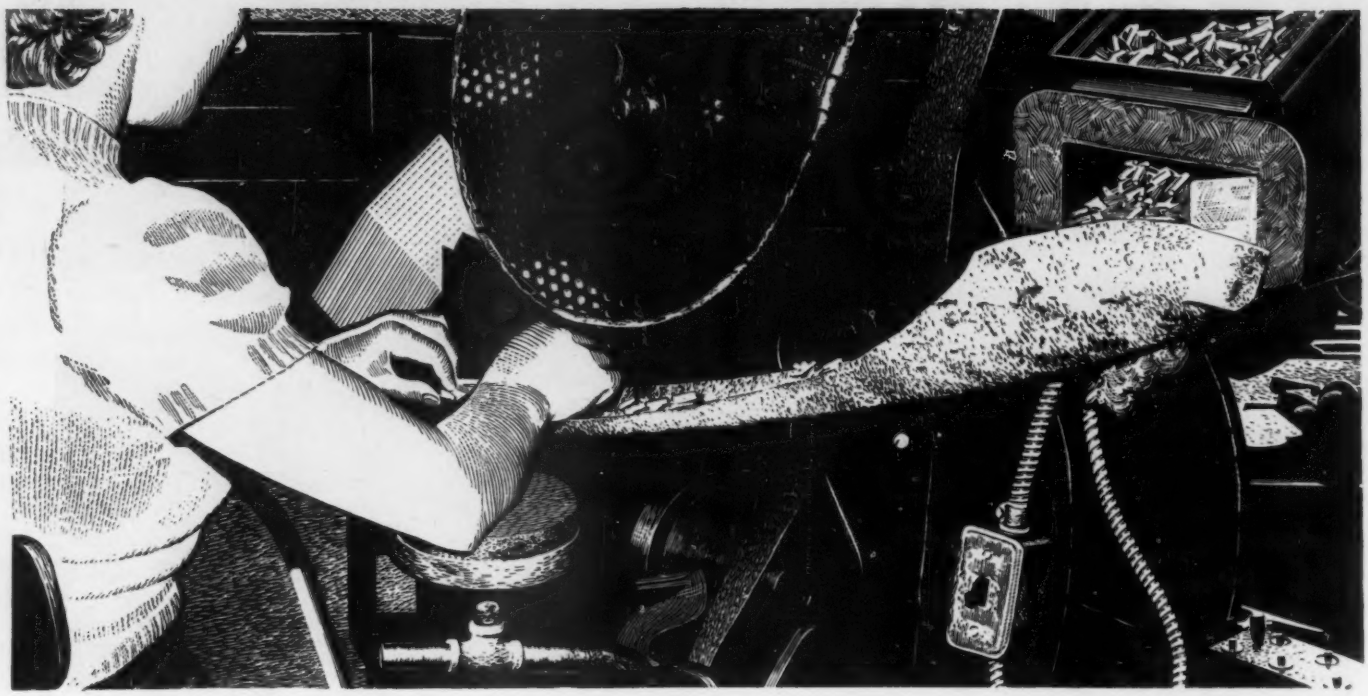
4 Swift PT boats get orders flashed by radio to torpedo enemy cruiser.

5 From observation post goes the telephone message to artillery, "Last of enemy tanks about to withdraw across bridge . . ."

6 Artillery officer telephones in reply, "Battery will lay a 5 minute concentration on bridge."

7 Tanks, followed by troops in personnel carriers, speed toward right on a wide end-run to flank the enemy. They get their orders and keep in contact—by radio.

Western Electric
ARSENAL OF COMMUNICATIONS



How Sally used up a copper mine

LOOK at the picture carefully. See that elbow-rest under Sally's arm?

It is significant. In fact, it's a humble sermon on war production.

Understand the existence of that arm-rest and you understand one of the basic reasons why, in less than seven months after war-conversion, American industry is hollering for Washington to provide more copper and other basic raw materials.

► Before Sally got her arm-rest, she reached over to a box, picked up a tiny part for an airplane instrument and placed it in the machine . . . Now the supply box is tilted and constantly jiggled, so that the parts flow to her finger-tips. With each motion Sally saves a fraction of an ounce of energy and half a second of time.

Without such tiny savings of time and effort, America's 20,000,000 factory workers would be hopelessly handicapped in their race against the millions at work with a head-start of years in Germany, Japan and Italy.

► The muscle-misers and second-savers of our factories come in handy in this war, when splitting seconds in production is as important as it is in battle.

Who are the men that provide the arm-rests, jiggle the supply-boxes, conduct the ceaseless hunt for wasted half-seconds and needless human motion?

► They are the "methods" men of industry. They have all sorts of titles: plant managers, operations managers, methods engineers, efficiency engineers, etc. But their job is "to manage men and machines to save time and materials."

In peace, these men were the core of the industrial system that gave you the world's highest living standard at the world's lowest cost in hours of work.

► In war, these same "methods-managers," with the intelligent cooperation of American workmen, are cutting years from our arming task by splitting seconds from its millions of individual operations. This example of time-saving is just an indicator of what a plant operating man does. Such men have many other jobs, including the important job of plant maintenance, but "second-splitting" is the field in which they are the envy of the whole world.

The American Production Manager is the product of the American industrial system. Complex, loose-jointed and aimless though our system may seem to the theorist, it meets every challenge, because it is the best system ever devised by man for discovering, developing and rewarding individual initiative.

Reprints of this advertisement are available in handy booklet form.

McGRAW-HILL PUBLISHING COMPANY, Inc.

330 WEST 42ND STREET • • NEW YORK

CONTACTS

FOR THE FIELD OF ELECTRONICS

FOUR-RANGE RHEOSTATS

Lubricated Contacts

WRITE FOR CATALOG

SIGNICO

SIGNAL & INDICATOR PILOT LIGHTS

for all electrical devices.

•

WRITE FOR CATALOGUE showing a complete line of assemblies for all purposes.

SIGNAL INDICATOR Corp.
140 CEDAR ST. NEW YORK, N. Y.

RAPID DEVELOPMENTS in LOUD SPEAKER DESIGN are necessary due to UNCLE SAM'S WAR NEEDS

University Reflex Speakers are being pressed into *new* and *unusual* application *every day.*

UNIVERSITY LABORATORIES
225 Varick Street, N. Y. C.

We manufacture a complete line of equipment

SPOT WELDERS, electric from ¾ to 500 KVA
TRANSFORMERS, special and standard types
INCANDESCENT LAMP manufacturing equipment
FLUORESCENT TUBE MAKING EQUIPMENT
ELECTRONIC EQUIPMENT, vacuum pumps, etc.
WET GLASS slicing and cutting machines for laboratory use
GENERAL GLASS working machines and burners
COLLEGE GLASS working units for students and laboratory

AC ARC WELDERS From 100 to 400 Amps.

EISLER ENGINEERING CO.
751 So. 13th St. (near Avon Ave.) Newark, New Jersey

FINE RIBBONS
***of* Tungsten and Molybdenum**

Molybdenum in width .006" to 1"
in thickness to .0005"
Tungsten Ribbon to specification

H. CROSS
15 Beekman St. New York

One inexpensive modern device . . .

can frequently help speed up operation and maintenance or production.

One product advertised in the "Contacts" Section may be the answer to your problem . . . a real money-saver.

To be informed—and reminded—on modern aids to economical operation, maintenance and production, check "Contacts" advertising regularly . . . every issue.

We have 37,400 CORNELL-DUBILIER DYKANOL CAPACITORS

in stock for immediate delivery

Try us for *all* of your Electronic supplies!

HARRISON RADIO CORP.
12 West Broadway • New York
Phone WOrth 2-6276

CRYSTALS *by* HIPOWER

Thousands of vital transmitting installations rely on the accuracy and dependability of Hipower Precision Crystal units. With recently enlarged facilities, Hipower is maintaining greatly increased production for all important services. When essential demand begins to return to normal, Hipower will be glad to help with your crystal needs.

HIPOWER CRYSTAL CO.
Sales Division—205 W. Wacker Drive, Chicago
Factory—2035 Charleston Street, Chicago, Ill.

MICROMETER FREQUENCY METER

for checking transmitters, from 1.5 to 56 mc., within 0.01 per cent.

LAMPKIN LABORATORIES
Bradenton, Fla., U. S. A.

ELECTRON TUBE MACHINERY

of every type,—standard, and special design
KAHLE ENGINEERING COMPANY

Specialists in Equipment for the Manufacture of Radio Tubes, Cathode Ray Tubes, Fluorescent Lamps, Incandescent Lamps, Neon Tubes, Photo Cells, X-ray Tubes and other glass or electronic products, on production or laboratory basis.
1307-1309 Seventh St., North Bergen, N. J.

HARVEY RADIOLAB'S, Inc.
Manufacturers of Radio Transmitters
ELECTRONIC APPARATUS
447 Concord Ave. Cambridge, Mass.

KIRKLAND INDICATING LIGHT

NOTE

The socket is the thing that makes the big difference

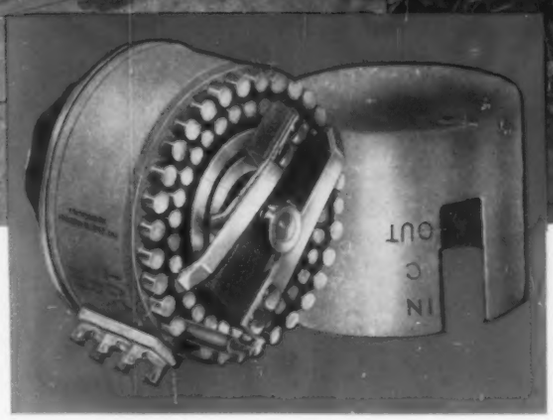
A molded bakelite socket, with a ¼" insulation barrier and two 6-32 terminal screws with cup washers.

#600 Unit

Underwriter's Approved

Distributed Nationally By
GRAYBAR ELECTRIC CO.
H. R. KIRKLAND CO. MORRISTOWN, N. J.

Photo Courtesy Pan American Airways



Vital Battlefront

Modern battlefronts are not limited to theaters of war since successful production lies behind military victories. Not only tanks, planes and guns are needed, but machines to make ever-increasing amounts of fighting equipment.

DAVEN builds component parts for many of these machines . . . parts for electronic devices which increase efficiency and speed production.

More than 80 models of Output Power Meters, Transmission Measuring Sets, Decade Resistance Boxes, Attenuation Networks, Volume Level Indicators and many other types of DAVEN Laboratory Test Equipment are used extensively in electrical, broadcast, sound picture and television fields. The DAVEN catalog lists the most complete line of precision attenuators in the world; "Ladder", "T" type, "Balanced H" and potentiometer networks—both variable and fixed—as well as Super DAVOHM precision type wire-wound resistors, with accuracies from ±1% to ±0.1%. A copy should be in your reference files.

THE DAVEN COMPANY

158 SUMMIT STREET **NEWARK, NEW JERSEY**

SEARCHLIGHT SECTION

EMPLOYMENT • BUSINESS • OPPORTUNITIES • EQUIPMENT—USED or RESALE

UNDISPLAYED RATE:

10 cents a word, minimum charge $2.00.

(See ¶ on Box Numbers.)

POSITIONS WANTED (full or part-time salaried employment only), ½ above rates.

PROPOSALS, 50 cents a line an insertion.

INFORMATION:

BOX NUMBERS in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

DISCOUNT of 10% if full payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH:

The advertising rate is $6.50 per inch for all advertising appearing on other than a contract basis. Contract rates quoted on request.

AN ADVERTISING INCH is measured ⅞ inch vertically on one column, 3 columns—30 inches —to a page. E.

NEW ADVERTISEMENTS received by 10 A. M. December 11th will appear in the January issue, subject to limitations of space available.

ENGINEER—RADIO
or
TECHNICIAN

Knowledge of circuits for supervisory position in transmitting tube circuit laboratory. Circuit knowledge and executive ability more important than college degree. Married man with children preferred. Salary open. Minimum $250.

Box #43
1457 Bway, Suite 617, N. Y. C.

Permanent Employment
ELECTRONIC DEVELOPMENT ENGINEERS

Well-established Eastern Massachusetts concern desires graduate electronic engineers with flair for research and eye to future. Permanent position concerned at present with important development work for government, with increased opportunities after the war. Unusual openings for men with capacity and initiative. Must be U. S. Citizens.

P-342, Electronics
330 West 42nd St., New York City

WANTED
WIRE WOUND RESISTOR SALESMEN

A new company forming, located in the Middle West, to manufacture Porcelain Enameled wire wound resistors. Territories open to experienced salesmen or manufacturer's agents now contacting manufacturers of radio, communication, and control equipment.

SW-351, Electronics
520 No. Michigan Ave., Chicago, Ill.

POSITION VACANT

CARRIER CURRENT ENGINEERS Wanted—The Department of Power of the Tennessee Valley Authority have open positions for several power line carrier current test and maintenance engineers (junior and assistant grades). The duties will involve initial testing, operating, and maintaining of carrier current telephone, pilot relaying, and telemetering equipment with increasing duties in connection with telemeter transmitters and receivers and load control. Applicants should have graduated from a recognized school of electrical engineering and have some experience in the type of work indicated. Interested candidates are requested to forward complete information regarding their qualifications, including citizenship, age, formal education, and employment record (giving dates, employers, salaries, and descriptions of duties). The Tennessee Valley Authority Act exempted the Authority from civil service regulation, but provided at the same time that all appointments should be made on the basis of merit and efficiency. Persons now employed on war work should not apply. Address all communications to the Employment Division, Tennessee Valley Authority, Knoxville, Tennessee.

FOR SALE

CLOSING small electron tube laboratory, with 10 KVA bombarder, evacuating system, compressors, stemming and sealing and glass, etc. Walter Steuber, Ridley Park, Pa.

LEGAL NOTICE

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of Electronics, published monthly at Albany, N. Y., for October 1, 1942.

State of New York } ss.
County of New York }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared J. A. Gerardi, who, having been duly sworn according to law, deposes and says that he is the Secretary of the McGraw-Hill Publishing Company, Inc., publishers of Electronics, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, McGraw-Hill Publishing Company, Inc., 330 West 42nd St., N. Y. C. Editor, Keith Henney, 330 West 42nd St., N. Y. C. Acting Managing Editor, Beverly Dudley (on leave—Donald G. Fink, 330 West 42nd St., N. Y. C. Business Manager, H. W. Mateer, 330 West 42nd St., N. Y. C.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder, the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) McGraw-Hill Publishing Company, Inc., 330 West 42nd St., N. Y. C. Stockholders of which are: James H. McGraw, 330 West 42nd St., N. Y. C. James H. McGraw, Jr., 330 West 42nd St., N. Y. C. James H. McGraw, James H. McGraw, Jr., and Curtis W. McGraw, Trustees for: Harold W. McGraw, James H. McGraw, Jr., Donald C. McGraw, Curtis W. McGraw, 330 West 42nd St., N. Y. C. Curtis W. McGraw, 330 West 42nd St., N. Y. C. Donald C. McGraw, 330 West 42nd St., N. Y. C. Anne Hugus Britton, 330 West 42nd St., N. Y. C. Mildred W. McGraw, Madison, N. J. Grace W. Mehren, 73 No. Country Club Drive, Phoenix, Ariz. J. Malcolm Muir & Guaranty Trust Co. of New York, Trustees for Lida Kelly Muir, 140 Broadway, N. Y. C.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above is. (This information is required from daily publications only.)

J. A. GERARDI, Secretary.

McGRAW-HILL PUBLISHING COMPANY, INC.

Sworn to and subscribed before me this 29th day of September, 1942.

[SEAL] CHESTER W. DIBBLE.

Notary Public, Queens County. Queens County Clerk's No. 4166. Certificate filed in N. Y. Co. Clerk's No. 889.

(My commission expires March 30, 1943)

FREELAND & OLSCHNER, INC.

REBUILDERS OF RADIO TRANSMITTING TUBES

Let Us Help You Solve Your Tube Problems

250 W up

611 Baronne St. New Orleans, La.

BEST QUALITY, USED ELECTRON TUBE MACHINERY

Equipment for the manufacture of all kinds of electron tubes, radio tubes, incandescent lamps, neon tubes, photo electric cells, X-ray tubes, etc.

AMERICAN ELECTRICAL SALES CO., INC.
65-67 East 8th St. New York, N. Y.

WANTED

WANTED

Audio Laboratory Equipment Material suitable for precision measurements, especially for distortion, frequency repsonse, inductance, capacity, etc. Must be in good condition, and made by Daven, General Radio, Hewlett Packard, Leeds & Northrup, RCA, Weston, or equal.

W-355, Electronics
520 No. Michigan Ave., Chicago, Ill.

IF THERE IS
Anything you want
that other readers of this paper can supply
OR—
Something you don't want
that other readers can use, advertise it in the
SEARCHLIGHT SECTION

TRANSMITTING TUBES *and* TIRES *have much in common today!*

Good tires are able to carry the terrific strain of operating at 100 miles per hour—but they last much longer when they're operated at 40.

RCA Transmitting Tubes have frequently been cited for outstanding performance under severe overload conditions—but that isn't what counts now. Service—as many hours of it as you can possibly get—is the all-important thing.

Actually, almost all of the important rules for tire conservation find a close parallel in the job of making Transmitting Tubes last longer.

Just as tires should be rotated from wheel to wheel, from spare to active, so should tubes be interchanged. Tube spares should be used from time to time in order to guard against deterioration.

Just as proper, specified air pressure will add much to tire life, so does operating tubes in strict accordance with specified conditions and conservative ratings provide the best assurance against premature failure.

Just as slower driving and careful handling are important tire conservation measures, so is it important to avoid unnecessary strains on tubes. As pointed out previously, as little as 5% reduction in filament voltage of pure-tungsten-filament types increases life 100%!

Another way of making an easier schedule for your tubes is to keep them cooler—by reducing plate voltage and dissipation, and by additional air cooling even beyond what may be specified. Still another way is by reducing filament voltage to 80%, whenever feasible, during standby periods.

Just as wheel alignment has an important bearing on tire life, so does the performance of related parts have much to do with tube life. For instance, properly designed smoothing filters are essential to obtaining optimum life from mercury-vapor rectifier tubes.

In short, these are the days when tube handling and operation are dictated by the necessity of obtaining every possible hour of tube life—just as is true of tires. Care in this direction—far above what you might consider giving in ordinary times—will pay worthwhile dividends.

RCA

TRANSMITTING TUBES

RCA Manufacturing Company, Inc., Camden, N. J.